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REPORT

UPON THE

STATE OF PUBLIC HEALTH

IN THE

City of Dublin

FOR THE YEAR 1893.

BY

SIR C. A. CAMERON.

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REPORT

UPON

The State of Public Health

AND THE

SANITARY WORK PERFORMED IN

DUBLIN - Health

DURING THE YEAR 1893;

ALSO

THIRTY-SECOND ANNUAL REPORT

UPON THE

ANALYSIS AND INSPECTION OF FOOD, &c.

Dr. John S. Billings
U. S. Army.

BY

SIR CHARLES A. CAMERON, M.D.; D.P.H. Camb.; M.R.C.P.; F.I.C.;

Past-President, Honorary Diplomate in Public Health, and Professor of Hygiene and Chemistry, Royal College of Surgeons; President of the Society of Public Analysts; Vice-President and Ex-President British Institute of Public Health; Examiner in Sanitary Science Royal University; Member of the Army Sanitary Committee; Hon. Member of the Academy of Medicine of Sweden, the State Medical Society of California, and of the Societies of Hygiene, France, Belgium, Paris, Bordeaux, &c.,

Superintendent Medical and Executive Officer of Health, City Analyst, and Inspector of Explosives.

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PUBLIC HEALTH COMMITTEE OF THE CORPORATION OF DUBLIN (1894).

The Right Hon. the Lord Mayor
Alderman William R. Maguire, Chairman
Councillor William Fanagan, Deputy-Chairman
Alderman Thomas D. Pile
,, Laurence Mulligan
Councillor Daniel Tallon
,, William Buckley
,, Gerald O'Reilly
,, Thomas Molloy
,, Henry Brown, J.P.
,, Christopher Grimes
,, P. J. M'Cabe
,, W. H. Beardwood, C.E.
,, Joseph Downes
,, J. P. Smyth
,, Henry Bonass

Sanitary Staff (1893).

Consulting Sanitary Officer.

Edward D. Mapother, M.D. ; F.R.C.S.I.

Superintendent Medical Officer of Health, Executive Sanitary Officer, Inspector of Explosives and City Analyst.

Sir Charles A. Cameron, M.D. ; F.R.C.S.I.

Secretary.

Joseph G. Bolger.

Clerks.

Charles M'Carthy Teeling
James J. Bourke
Joseph Broderick
John J. Murray (in Accountant's Office)

District Medical Officers of Health.

South Side.

Doctor Thomas Purcell	No. 1 District
,, John Barton	,,
,, Newell	No. 2 District
,, St. George Ashe	,,
,, G. P. Cope	No. 3 District
,, H. Day	,,
,, Herbert Byrne	No. 4 District
,, Ninian M. Falkiner	,,

North Side.

Doctor	John Garland	No. 1 District
,,	Henry W. Oulton	,,
,,	Thomas Donnelly	,,
,,	O'Connell J. Delahoyd	No. 2 District
,,	Michael Strahan	,,
,,	Albert O. Speedy	No. 3 District
,,	William D. White	,,

Superintendent of Disinfection.

John Macallan, F.R.S.E., F.I.C.

Surveyors of Buildings.

Walter Butler.
D. J. Walsh.

Inspector of Sewers.

Patrick Kenny.

Assistant Inspector of Sewers.

Patrick Ward.

Superintendent of Public Baths and Wash-houses.

John P. O'Brien.

Registrar of Dairies, &c., under Provisions of Contagious Diseases (Animals) Act.

Patrick Nally.

Superintendent of Artisans' Dwellings.

Charles Verschoyle.

Constables Acting as Food Inspectors.

Henry Green.
John Hickey.

Chief Disinfector.

Peter Flynn.

Assistant Disinfectors.

Thomas Dunne.
James M'Manus.
Richard Power.

Keeper of Disinfecting House and Laundry, Marrowbone-lane.

Joseph Flynn.

Inspectors of Dairies and Cowsheds.

James Collins. James Cooke.

Assistant Inspectors of Dairies.

John Haughton. John Weir.

SANITARY SUB-OFFICERS.

Superintendent.

Inspector James Halligan.

South Side.

Inspector.

Sergeant William Reid.

District Officers.
Police.

Constable Thomas Nolan	No. 3 District
,, James Holland	No. 4 District
,, John Fitzgerald	,,

Civilians.

John J. Kane	No. 1 District
Edward O'Shea	,,
Thomas Kenny	,,
Myles Reilly (died July, 1893)	No. 2 District
John M'Mahon	,,
Patrick Kelly	,,
Henry Sheeran	No. 3 District
John O'Brien	,,
Thomas Rice	,,

North Side.

Inspector.

Sergeant Robert Thompson.

District Officers.
Police.

Constable Dominick Kelly	No. 1 District

Civilians.

Timothy Lyons	No. 1 District
John Devine	,,
Michael Hackett	No. 2 District
John Miller (died Dec., 1893)	,,
James M'Ternan	,,
Mathew Forde	No. 3 District
Thomas Reilly	,,
Thomas Brett	,,
James Kane	,,

Office Attendant.

Richard L. Reid.

REPORT

UPON

The State of Public Health

AND THE

SANITARY WORK PERFORMED IN DUBLIN

DURING THE YEAR 1893.

BY

SIR CHARLES A. CAMERON,

Superintendent Medical and Executive Officer of Health and City Analyst.

POPULATION.

The City of Dublin is situated in Latitude 53° 20′ 33″ N.; Longitude 6° 17′ 130″ W. The area of the City comprises 3,808 acres. It is, with the exception of a small portion of its boundary, surrounded by the following townships:—Pembroke, Rathmines and Rathgar, Kilmainham, Clontarf and Drumcondra. The City and these townships, together with Blackrock and Kingstown, and portion of some rural districts, comprise the Dublin Metropolitan registration area. In 1891 the population of this area was 349,594, and it is believed not to to have increased since that year. The population of the City or Municipal Districts in 1893, was 245,001.

DENSITY OF POPULATION.

The numbers of persons residing in the whole area, was in the ratio of 14·2 per acre, and in the City 64·3 per acre.

AGES OF THE POPULATION.

In 1891 the ages of the population in the Dublin registration area, were as follows :—

Under 5 years	5 and under 20	20 and under 40	40 and under 60	60 and under 80	80 and upwards
37,003	101,853	119,890	65,265	23,765	1,818

In the City there were 51,851 families, comprising 127,408 females and 117,503 males.

HOUSES.

The number of inhabited houses was 25,766. There were 3,448 uninhabited houses, and 156 were being built.

AREA, VALUATION, POPULATION, NUMBER OF HOUSES INHABITED, UNINHABITED, and BUILDING, of the several MUNICIPAL WARDS in the CITY OF DUBLIN in 1891.

MUNICIPAL WARDS	Area Statute Acres	Valuation exclusive of exemptions			Population		Houses, 1891			
					1881	1891	In-habited	Unin-habited	build-ing	Total Houses
North City, 6 *Wards.*		£	*s.*	*d.*						
Arran-quay	559	45,042	5	0	27,405	26,546	2,636	241	26	2,903
Inns-quay	226	42,973	0	0	22,707	22,496	2,301	268	7	2,576
Mountjoy	221	40,659	15	0	19,407	22,469	2,557	251	2	2,810
North City	82	48,886	0	0	10,885	9,774	930	468	7	1,405
North Dock	565	71,596	10	0	22,707	23,075	2,839	379	6	3,224
Rotundo	138	37,087	15	0	12,210	12,549	1,381	100	5	1,486
Total, North City ...	1,791	286,245	5	0	115,321	116,909	12,644	1,707	53	14,404
South City, 9 *Wards.*										
Fitzwilliam	202	49,224	10	0	10,786	11,949	1,573	78	4	1,655
Mansion House ...	114	34,226	5	0	11,767	11,096	963	117	5	1,085
Merchants'-quay ...	313	34,255	15	0	20,281	23,034	2,528	269	3	2,800
Royal Exchange ...	71	48,713	5	0	9,778	8,766	778	183	2	963
South City	55	52,892	15	0	6,176	4,599	575	368	25	968
South Dock	285	62,348	15	0	15,051	14,895	1,658	174	11	1,843
Trinity	160	46,881	5	0	13,662	12,176	1,055	172	21	1,248
Usher's-quay ...	583	42,485	0	0	22,779	21,129	1,750	157	21	1,928
Wood-quay	159	33,591	15	0	24,001	20,448	2,240	223	11	2,474
Total, South City ...	1,942	404,619	5	0	134,281	128,092	13,120	1,741	103	14,964
Total, North & South, City	3,733	690,864	10	0	249,602	245,001	25,764	3,448	156	29,368

Gas mains and water mains of City of Dublin included in valuation of Wards

Number of Families in the City of Dublin occupying each Class of House Accommodation in 1891.

Class of Houses	House Accommodation				Total Families	Total Houses
	1st Class	2nd Class	3rd Class	4th Class		
1st Class . .	4,694	2,990	5,410	12,166	25,260	8,720
2nd ,, . .	—	10,289	6,845	6,908	24,042	14,638
3rd ,, . .	—	—	2,281	261	2,542	2,399
4th ,, . .	—	—	—	7	7	7
Total .	4,694	13,279	14,536	19,342	51,851	25,764

The accommodation which the houses afford has been arranged under four classes, viz. :—1st class consists of first-class houses occupied by one family. 2nd class consists of second-class houses occupied by one family, or of first-class houses occupied by two or three families. 3rd class consists of third-class houses with one family each, second-class houses with two or three families, and first-class houses occupied by four or five families. 4th class includes all fourth-class houses with more than one family, second-class houses with four or more families, third-class houses and first-class houses inhabited by six or more families.

METEOROLOGICAL STATISTICS.

My friend, Dr. John W. Moore, F.M.S., has kindly furnished me with the following meteorological statistics for 1893. The observations were made at his house, No. 40 Fitzwilliam-square, an open space, but situated not far from the centre of the metropolitan districts.

Rainfall in 1893,

At 40 *Fitzwilliam-square West, Dublin.*

Rain Gauge:—Diameter of funnel, 8 *in. Height of Top— Above ground* 3 *ft.* 2 *in.; above sea level,* 50 *ft.*

Month	Total Depth	Greatest Fall in 24 Hours		Number of Days on which ·01 or more fell
	Inches	Depth	Date	
January ...	2·239	·513	31st	19
February ...	2·669	·480	9th	22
March ...	·288	·101	2nd	8
April ...	1·046	·370	17th	7
May ...	1·666	·720	20th	10
June ...	1·716	·492	26th	12
July ..	2·042	·871	12th	14
August ...	2·713	·516	18th	16
September ...	·729	·174	6th	14
October ...	1·033	·322	14th	16
November ...	1·870	·821	16th	17
December ...	2·482	·499	24th	19
Total, ...	20·493	—	—	174

The rainfall was 7·203 inches in defect of the average annual measurement of the twenty-five years, 1865-89, inclusive—viz., 27·696 inches.

It will be remembered that the rainfall in 1887 was very exceptionally small—16·601 inches, the only approach to this measurement in Dublin being in 1870, when only 20·859 inches fell; in 1884, when the measurement was 20·467 inches; and in 1893, with its rainfall of 20·493 inches. In seven of the twenty-five years in question the rainfall was less than 26 inches, and in 1885 it was 26·614 inches.

The scanty rainfall in 1887 was in marked contrast to the abundant downpour in 1886, when 32·966 inches—or as nearly as possible double the fall of 1887—fell on 220 days. Only twice since these records commenced has the rainfall in Dublin exceeded that of 1886—namely, in 1872, when 35·566 inches fell on 238 days, and in 1880, when 34·512 inches were measured on, however, only 188 days.

In 1893, there were 174 rainy days, or days upon which not less than ·01 inch of rain (one hundredth of an inch) was measured. This was considerably in defect of the average number of rainy days, which was 194·3 in the twenty-five years, 1865-89, inclusive. In 1868—the warm, dry year of recent times—as well as in 1887, the rainy days were only 160, and in 1870 there were only 145. In 1868, however, the rainfall amounted to 24·935 inches, or more than 8 inches above the measurement in 1857; and even in 1870, 20·859 inches were recorded,

The rainfall in 24 hours, from 9 a.m. to 9 a.m. exceeded one inch on two occasions in 1892—viz., May 28th (2·056 inches), and August 16th (1·310 inches). On no occasion in 1893 did one inch of rain fall on a given day in Dublin ; the maximal daily measurements were ·871 inch on July 12th, and ·821 inch on November 16th.

Included in the 174 rainy days in 1893 are 17 on which snow or sleet fell, and 21 on which there was hail. In January hail was observed on 4 days, in February on 6 days, in March on 2 days, in April, August and October on 1 day, in November on 5 days, and on one day in December. Snow or sleet fell on 4 days in January, on 7 days in February, on 2 days in March, on 4 days in November, and on not one occasion in December. Thunder occurred on ten occasions during the year—three times in May, twice in July and August, and once in June, September, and December. Lightning was also seen on four occasions in October, twice in August and September, and once in February and December.

The rainfall was distributed as follows:—5·196 inches fell on 49 days in the first quarter, 4·428 inches on 29 days in the second, 5·484 inches on 44 days in the third, and 5·385 inches on 52 days in the fourth and last quarter.

The rainfall in the first six months was 9·624 inches on 78 days—that is, not one-half of the year's record. In February the rainfall was 2·669 inches on 22 days, in August 2·713 inches fell on 16 days, and in December 2·482 inches on 19 days.

Of the 5·385 inches which fell in the fourth quarter of the year, only 1·033 inches were measured in October on 16 days, and 1·870 inches in November on 17 days. In December the rainfall was both considerable and frequent.

Aurora Borealis was observed on three occasions—namely, on February 16, September 1st, and October 29th. More or less fog prevailed on 38 occasions—4 in

January, 3 in February, 8 in March, 2 in April, 3 in August, September, and October, respectively; 5 in November, and 7 in December. The March fogs were very dry. High winds were noted on 130 days—18 in January, 11 in February and March, respectively; 4 in April and May, respectively; 7 in June, 9 in July, 10 in August, 14 in September, 10 in October, 15 in November, and 17 in December. The high winds amounted to gales (force 7 or upwards according to the Beaufort scale) on 24 occasions—4 in January and February, respectively; 1 in March and June, respectively; 3 in August, 2 in October, 4 in November, and 5 in December.

Abstract of Meteorological Observations taken at Dublin (40 Fitzwilliam-square, West) during the Year 1893,

MONTH	Abs. Max.	Date	Abs. Min.	Date	Mean Daily Max.	Mean Daily Min.	Rainfall	Rainy Days	Mean Height of Barometer	Highest Pressure	Date	Lowest Pressure	Date	Prevalent Winds
	°		°		°	°	Ins.		Ins.	Ins.		Ins.		
January ...	54·9	30th	20·2	3rd	44·7	36·9	2·239	19	30·053	30·559	21st	29·178	28th	W., N.W.
February ...	56·4	18th	26·0	25th	47·5	37·8	2·669	22	29·604	30·218	4th	28·790	14th	W., S.W., S.
March ...	64·8	29th	34·0	17th	54·6	41·5	·288	8	30·085	30·411	19th	29·267	1st	W., E.N.E., E.S.E.
April ...	66·8	22nd	36·2	14th	58·2	44·6	1·046	7	30·171	30·575	8th	29·793	19th	N.W. E. N. E.
May ...	70·2	11th	42·8	31st	62·7	50·6	1·666	10	30·038	30·455	10th	29·407	19th	E., S.E., W.N.W.
June ...	74·7	19th	46·9	23rd	66·3	53·4	1·716	12	30·002	30·398	7th	29·320	27th	E., N.W., S.E.
July ...	74·5	23rd	50·0	22nd	68·1	55·0	2·042	14	29·896	30·234	27th	29·429	19th	N.W., W., N.E.
August ...	79·8	15th	47·9	26th	69·6	56·4	2·713	16	29·965	30·396	29th	29·290	21st	S.W., N.W.
September ...	72·0	5th	38·2	21st	62·6	49·1	·729	14	29·848	30·345	12th	29·052	29th	N.W., W.
October ...	67·7	21st	31·7	31st	56·0	43·9	1·033	16	29.855	30·507	23rd	29·061	4th	W., S.W.
November ...	57·6	3rd	30·8	17th	48·7	38·9	1·870	17	30·058	30·594	21st	28·719	16th	N.W., N., N.E.
December ...	56·7	15th	28·3	2nd	48·1	38·9	2·482	19	29·868	30·706	30th	28·530	10th	S.W., W.
Extremes, Totals and Means	° 79·8	Aug. 15th	° 20·2	Jan. 3rd	° 57·3	° 45·6	Ins. 20·493	Days 174	Ins. 29·954	Ins. 30·706	Dec. 30th	Ins. 28·530	Dec. 10th	N.W., W., S.W.
					51.5°									

January 1*st*, 1894.

John William Moore, B.A., M.D., Univ. Dubl.; F.R.C.P.I.;
F. R. Met. Soc.

I have been favoured with the annexed record of the Meteorological Observations, made at the Ordnance Survey Office, Phœnix Park, in 1893, under the direction of Lieut.-Colonel Kirkwood, R.E., Superintendent.

ABSTRACT OF METEOROLOGICAL OBSERVATIONS.

Made at the Ordnance Survey Office, Phœnix Park, Dublin, during the Year 1893.

Latitude—53° 21′ 44·65″ North. Longitude—6° 21′ 6·35″ West. Height above M.S.L.—155·3 Feet.

1893	BAROMETER						
	Corrected for Altitude and Reduced to 32° Fah.						
	Mean				Highest in Month	Lowest in Month	Range
	9.0 a.m.	9.0 p.m.	Mean	Range			
January ..	30·054	30·067	30·061	0·013	30·554	29·198	1·356
February ..	29·611	29·611	29·611	0·000	30·209	29·862	1·347
March ..	30·091	30·101	30·096	0·010	30·423	29·276	1·147
April ..	30·183	30·170	30·177	0·013	30·589	29·843	0·746
May ..	30·049	30·040	30·045	0·009	30·459	29·425	1·034
June ..	30·013	30·004	30·009	0·009	30·407	29·346	1·061
July ..	29·906	29·897	29·902	0·009	30·233	29·451	0·782
August .	29·973	29·968	29·971	0·005	30·423	29·297	1·126
September ..	29·859	29·834	29·847	0·015	30·356	29·048	1·308
October ..	29·859	29·860	29·860	0·001	30·505	29·059	1·446
November ..	30·077	30·065	30·071	0·012	30·582	28·873	1·709
December .	29·848	29·915	29·882	0·067	30·718	28·583	2·135
TOTAL ..	359·523	359·532	359·533	..	..	..	..
MEAN ..	29·960	29·961	29·961	..	..	..	..

1893	TEMPERATURE											
	Self-Registering Thermometers							Hygrometer				
				Mean				9.0 a.m., Mean				
	Highest in Month	Lowest in Month	Range	Of all Highest	Of all Lowest	Temp.	Range	Dry Bulb	Wet Bulb	Dew Point	Elastic Force of Vapour	Humidity
January ..	55·2	13·6	41·6	44·3	34·5	39·4	9·8	39·0	37·4	35·3	·211	87·3
February ..	55·9	21·7	34·2	47·2	35·3	41·3	11·9	40·6	38·7	36·2	·218	84·6
March ..	63·5	28·8	34·7	54·3	36·7	45·5	17·6	47·2	44·3	41·1	·260	80·2
April ..	66·9	27·7	39·2	58·2	38·5	48·4	19·7	51·5	48·1	44·6	·299	77·7
May ..	71·4	36·8	34·6	62·2	46·2	54·2	16·0	56·0	52·4	49·1	·350	78·3
June ..	76·4	39·0	37·4	66·6	47·9	57·3	18·7	61·6	57·1	53·2	·412	74·7
July ..	74·9	44·6	30·3	68·1	51·2	59·7	16·9	61·2	57·1	53·6	·415	76·7
August .	82·0	39·3	42·7	69·2	52·4	60·8	16·8	62·5	58·4	55·0	·438	76·9
September ..	72·9	32·9	40·0	62·4	45·2	53·8	17·2	56·5	52·6	49·1	·354	76·8
October ..	66·9	26·7	40·	56·0	40·7	48·4	15·3	49·4	46·6	43·6	·293	81·2
November ..	55·9	23·4	32·5	47·9	36·1	42·0	11·8	42·2	40·3	38·0	·234	85·3
December .	56·8	24·8	32·0	47·2	36·1	41·7	11·1	42·5	40·7	38·2	·239	85·2
TOTAL ..	..	..	..	683·6	500·8	592·5	..	610·2	573·7	537·0	3·723	964·9
MEAN ..	..	..	..	57·0	41·7	49·4	..	50·9	47·8	44·8	·310	80·4

1893	RAIN			OZONE	CLOUD	
	Number of Days Rain or Snow fell	Total Amount for Month	Greatest Amount that Fell in 24 Hours	9.0 a.m.	Monthly Total	Daily Mean
January ..	23	2·420	·570	·7	195	6·3
February ..	22	2·845	·520	·6	178	6·4
March ..	14	0·460	·110	·5	153	4·9
April ..	6	0·780	·300	·5	131	4·4
May ..	10	2·145	1·030	·5	190	6·1
June ..	12	2·005	·570	·6	158	5·3
July ..	22	2·920	1·120	·5	195	6·3
August .	13	2·505	·470	·6	175	5·6
September ..	17	0·855	·125	·7	168	5·6
October ..	18	1·190	·280	·6	149	4·8
November ..	22	1·730	·460	·6	199	6·6
December .	23	2·565	·660	·6	176	5·7
TOTAL ..	207	22·420	..	7·0	2067	68·0
MEAN ..	..	..	..	·6	172	5·7

1893	WIND																
	Number of Days it Blew in certain Directions at 9.0 a.m., and the Total Pressure, in Lbs., per Square Foot																
	N.	Pressure	N.E.	Pressure	E.	Pressure	S.E.	Pressure	S.	Pressure	S.W.	Pressure	W.	Pressure	N.W.	Pressure	Calm
January ..	2	0·26	1	0·31	6	3·25	4	2·01	1	0·88	3	1·00	10	5·49	3	1·01	1
February ..	0	0·00	1	0·50	1	0·06	2	0·25	5	1·93	4	2·62	14	12·14	1	0·06	0
March ..	1	0·06	1	0·13	4	1·32	5	0·75	0	0·00	4	2·68	13	9·00	2	0·32	1
April ..	1	0·38	2	0·25	13	4·51	1	0·38	0	0·00	0	0·00	12	3·99	0	0·00	1
May ..	2	0·32	1	0·06	10	2·50	5	1·81	0	0·00	2	0·62	8	2·01	2	0·63	1
June ..	2	0·75	2	0·25	7	0·95	4	0·63	1	0·25	2	1·88	9	2·45	3	1·75	0
July ..	3	0·88	2	0·44	3	0·50	3	0·63	1	0·38	2	0·44	12	3·39	5	1·37	0
August .	3	0·76	1	0·25	3	0·18	2	0·44	4	1·24	4	1·87	12	8·94	2	0·44	0
September ..	0	0·00	0	0·00	3	0·99	0	0·00	1	0·88	0	0·00	18	8·26	5	1·49	3
October ..	1	0·06	0	0·00	0	0·00	0	0·00	0	0·00	5	4·56	24	9·19	0	0·00	1
November ..	8	7·63	2	0·81	4	1·19	1	0·88	0	0·00	1	2·25	10	6·68	2	2·00	2
December .	3	1·56	0	0·00	0	0·00	1	3·25	2	2·75	16	16·13	7	2·87	1	0·44	1
TOTAL ..	26	12·66	13	3·00	54	15·45	28	11·03	15	8·31	43	34·05	149	74·41	26	9·51	11
MEAN ..	..	0·49	..	0·23	..	0·29	..	0·39	..	0·55	..	0·79	..	0·50	..	0·37	..

The highest Barometer during the year was 30·718 on 30th December, at 9 a.m. Wind Calm.

The lowest Barometer during the year was 28·583 on 13th December, at 9 a.m. Wind S.W.

The highest Temperature during the year was 82·0 on 15th August.

The lowest Temperature during the year was 13·6 on 3rd January.

Rain or Snow fell on 207 days during the year.

The greatest Rainfall in 24 hours was 1·120 inches on 12th July, with Wind N.N.E.

The prevailing Wind was W. 149 days; total Pressure, 74·41, averaging 5·00 lbs. per square foot.

The strongest Wind was N., on 18th Nov., on which the Pressure was 0·50 lbs. per square foot.

VITAL AND MORTAL STATISTICS, 1893.

Births.

In 1893 (52 weeks) the births in the whole registration area numbered 10,009 (5,067 boys and 4,942 girls), being equal to 1 in 35, or 29 in every 1,000 of the estimated population. The average rate for the preceding ten years was 29 per 1,000. In 1892 the births numbered 9,699, or 28 per 1,000 of the population.

Of the 10,009 births, 7,836, or 32 in every 1,000 of the estimated population, occurred in the city, and 2,173, or only 21 per 1,000 of the inhabitants, in the suburbs. In London the birth-rate was 31 per 1,000, in Glasgow 34, and in Edinburgh 28 per 1,000 inhabitants.

Of the 10,009 births, 2,525 were registered in the first quarter, 2,678 in the second quarter, 2,487 in the third, and 2,319 in the fourth quarter of the year. The weekly average was 192, or 5 in excess of the number in 1892.

Deaths.

During the year 1893 the deaths of 9,409 persons (4,626 males and 4,626 females) were registered as having occurred within the Dublin registration area. Omitting 318 deaths of persons admitted into public institutions from places outside the Dublin registration area, the death-rate was 26 per 1,000 of the estimated population. Including these 318 deaths, the rate was 26·9 per 1,000, being 1 below the average rate for the previous 10 years.

Of the 9,409 deaths, no fewer than 3,128, or 33·2 per cent., occurred in the various workhouses, hospitals, lunatic asylums and prisons. 679 deaths took place in the North Dublin Union Workhouse, 706 in the South Dublin, and 45 (those admitted from the Dublin registration area) in the Rathdown Union Workhouse. In 1829, 31·4 per cent of the deaths occurred in the hospitals, workhouses, &c. In English towns only about 18 per cent. of the deaths take place in public institutions.

These facts seem to show that the proportion of poor and destitute people in Dublin is much larger than in the English towns.

The number of deaths from zymotic diseases was 1,533, being 280, or 22·3 per cent. over the average yearly number in the previous 10 years, and 635 above the number in the year 1891, which had the lowest number up to that year.

The deaths (omitting 31 of hospital patients admitted from extra-metropolitan districts) from the principal zymotic diseases numbered 1,074, equivalent to a rate of 3·1 per 1,000 persons living. In the city the rate was 3·5 (3·7 on the north side and 3·4 on the south); and in the suburbs it was 1·3. The average rate in the large English towns was 3·1.

Of the 9,009 deaths in the whole registration area, 2,452 were registered in the first quarter of the year, 2,283 in the second, 2,289 in the third, and 2,385 in the fourth. The weekly average was 181.

DEATHS IN THE CITY OF DUBLIN, OR MUNICIPAL DISTRICTS, IN 1893.

The total number of deaths from all causes was 7,139, as against 7,813 in 1892. There were, therefore, 740 fewer deaths in 1893 than in 1892. The death-rate was 29·1 per 1,000 persons living in 1893. In 1892 it was 31·9; in 1891, 28·5; in 1890, 28·1; in 1889, 27·9; in 1888, 26·22; in 1887, 33·2; in 1886, 28·4; in 1885, 30·69; and in 1884 it was 29·96.

STATISTICS OF DEATHS IN THE CITY OF DUBLIN.

The following Table shows the Death-rate within the Municipal, or City, Districts of the Metropolitan Registration Area since January, 1884.

Death-rate per 1,000 persons from all causes.

	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	Average 1884-93
January ...	28·88	35·15	32·52	33·96	36·85	31·46	48·3	38·38	46·7	33·9	36·60
February	32·27	35·56	35·42	33·71	31·66	29·74	36·7	29·07	37·25	29·3	33·06
March ...	29·73	39·38	38·65	33·06	33·64	31·49	29·92	30·90	40·52	26·8	33·41
April ...	27·35	36·08	28·86	33·80	27·83	28·55	26·18	29·90	40·50	28·12	30·71
May ...	32·98	32·98	27·06	29·9	24·49	25·64	24·4	24·15	35·7	27·76	28·53
June ...	25·95	29·02	24·79	29·31	23·60	22·47	22·77	23·2	30·16	29·4	27·06
July ...	21·84	23·50	20·00	31·27	21·60	22·86	20·82	20·12	31·65	30·25	24·28
August ...	28·59	25·00	20·51	36·36	20·86	27·2	22·42	23·37	24·72	27·9	25·68
September	30·3	25·15	27·17	33·27	22·4	28·81	20·25	24·58	24·72	27·02	36·36
October ...	29·88	24·79	22·16	28·76	24·32	29·96	22·76	26·17	24·75	26·06	25·95
November	33·15	29·48	26·80	37·40	25·87	27·42	23·4	33·57	27·1	31·1	29·54
December	34·97	32·20	34·69	36·95	28·24	33·19	32-08	35·82	28·8	34.1	33·10
Year ...	29·66	30·69	28·22	33·15	26·78	28·23	27·5	28·27	30·55	29·30	29·52

DEATH-RATE FROM SEVEN PRINCIPAL ZYMOTIC DISEASES.

	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	Average 1884-93
January ...	2·74	3·56	2·3	2·27	4·8	2·08	2·8	1·32	2·5	2·5	2·6
February	2·20	2·94	3·21	2·11	3·4	2·5	2·45	0·6	1·7	1·4	1·9
March ...	2·64	5·15	2·42	2·28	3·0	1·87	2·55	0·6	4·78	1·7	2·3
April ...	2·65	5·1	2·2	3·0	2·7	1·92	1·68	0·84	6·65	1·5	2·8
May ...	2·23	4·53	1·27	3·7	2·9	1·62	1·75	0·65	7·1	2·7	2·3
June ...	1·92	3·4	1·07	4·9	2·1	1·8	1·57	1·0	5·62	3·6	1·9
July ...	2·7	2·64	1·56	7·57	2·52	3·1	1·0	1·0	2·60	6·6	3·1
August ...	6·84	2·68	2·37	10·5	2·7	5·32	2·27	1·9	2·94	5·9	4·3
September	5·49	3·38	5·46	8·7	3·25	4·35	2·32	3·8	3·77	5·3	4·5
October ..	4·18	1·91	3·80	5 8	4·1	3·5	2·74	3·35	1·5	3·6	3·4
November	3·99	2·46	·22	6·2	2·4	2·7	2·12	3·12	1.5	2·8	3·1
December	3·56	3·63	3·3	3·4	2·6	3·18	1·4	2·92	1·7	3·1	2·8
Year ...	3·43	3·45	2·77	5·04	3·03	2·83	2·05	1·74	3·5	3.39	2·9

The yearly Rates are deducted from the monthly Rates, but taking the collective figures for the whole year 1893, the yearly Rate from Deaths from all causes was 29·1, and for principal Zymotic Diseases, 3·4.

Number of Deaths from various Diseases, and Ratio of the Deaths per 1,000 *of the Population in the City of Dublin, in* 1893.

Name of Diseases	Number of Cases	Rate of Mortality per 1,000 Persons Living
Zymotic Diseases—		
Small-pox	0	0·00
Measles	81	0·33
Scarlet Fever	18	0·07
Typhus Fever	11	0·04
Whooping-cough	144	0·58
Diphtheria	12	0·05
Simple and Ill-defined Fever	8	0·03
Enteric Fever	218	0·88
Diarrhœa, Dysentery	347	1·41
Other Zymotic Diseases	304	1·24
Total	1,143	4·66
Parasitic Diseases	8	0·03
Dietetic Diseases	23	0·09
Constitutional Diseases—		
Phthisis, or Pulmonary Consumption	968	3·94
Other Constitutional Diseases	668	2·72
Total	1,636	6·67
Developmental Diseases	503	2·05
Local Diseases—		
Convulsions and other Diseases of Brain and Nervous System	832	3·39
Diseases of		
Organs of Special Sense	5	0·02
Circulatory System	527	2·15
Respiratory System	1,330	5·42
Digestive System	381	1·55
Lymphatics, &c.	4	0·01
Urinary System	166	0·68
Generative System	21	0·08
Accidents of Childbirth	31	0·13
Diseases of Locomotive System	24	0·09
Do. Integumentary System	14	0·06
Total	3,335	13·61
Violent Deaths	157	0·64
Deaths from Ill-defined and Unspecified Causes	334	1·36
Deaths from all Causes	7,139	29·16
Do. from Principal Zymotic Diseases	839	3·42

CHART I.

Number of Deaths from all causes, and from Zymotic Diseases Registered Weekly in 1893.

The higher Curve shows Total Deaths ; the lower Curve, Total Deaths from Zymotic Diseases.

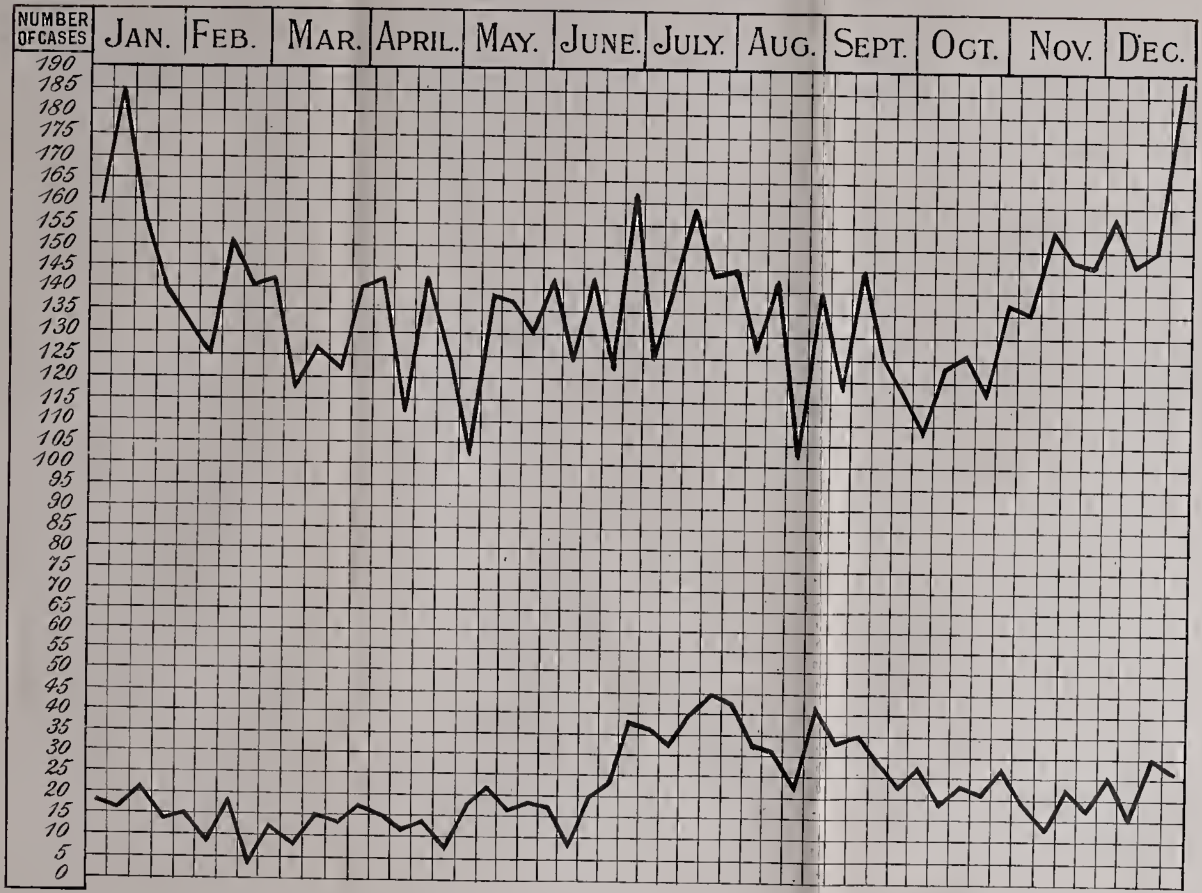


CHART II.

Number of Deaths from each of Four Zymotic Diseases Registered Weekly in 1893.

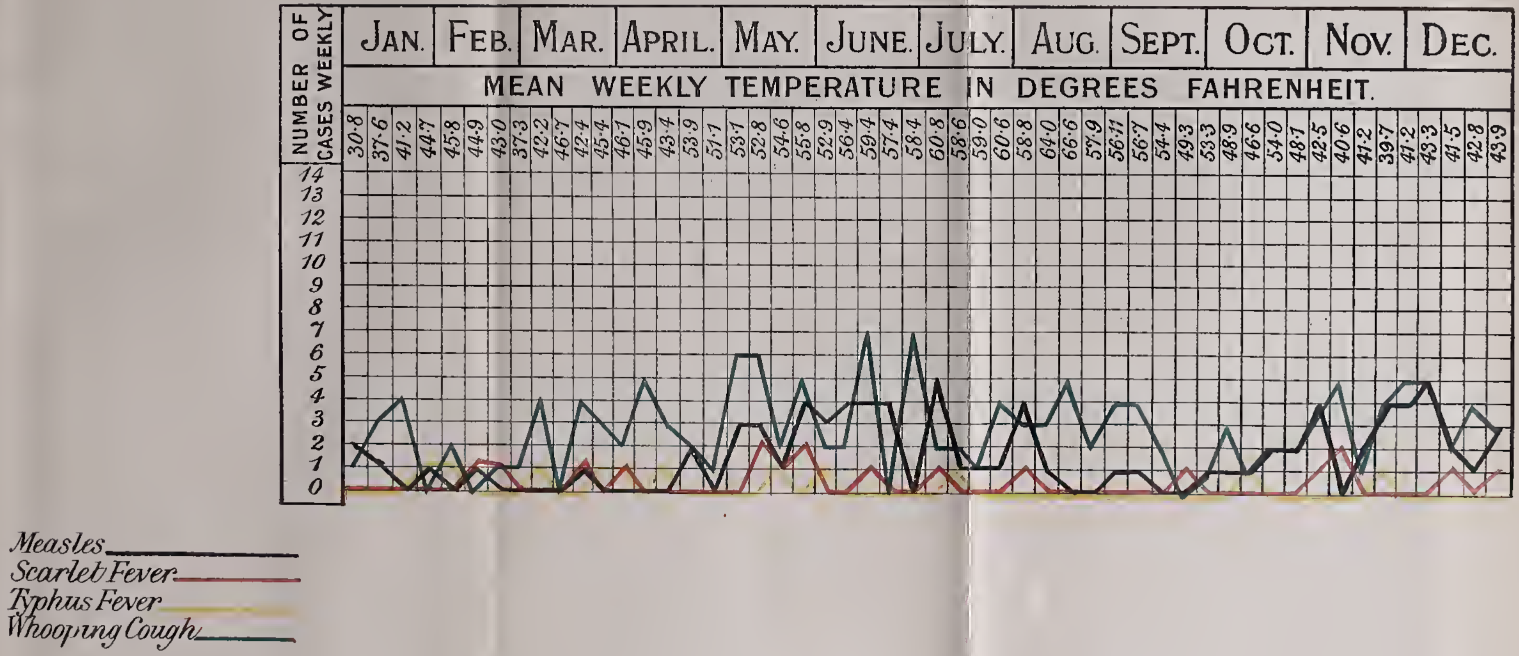


CHART III.

Number of Deaths from each of Three Zymotic Diseases Registered Weekly in 1893.

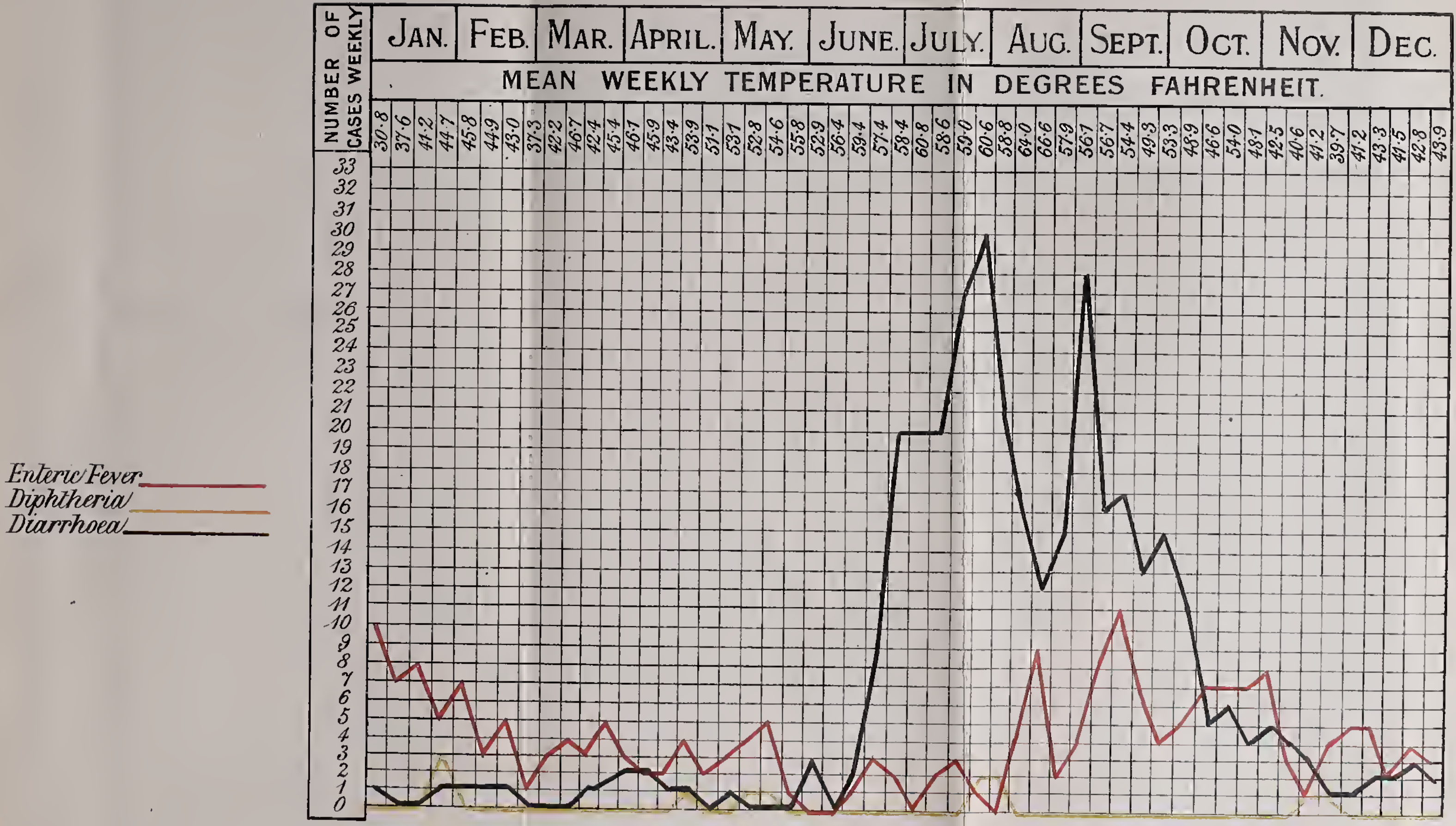


CHART IV.

Chart showing relation existing between Decrease in Temperature and Increase in Mortality, from Diseases of the Respiratory Organs.

The Black Line gives the Number of Cases weekly; the Red Line shows the Mean Weekly Temperature during the year 1893.

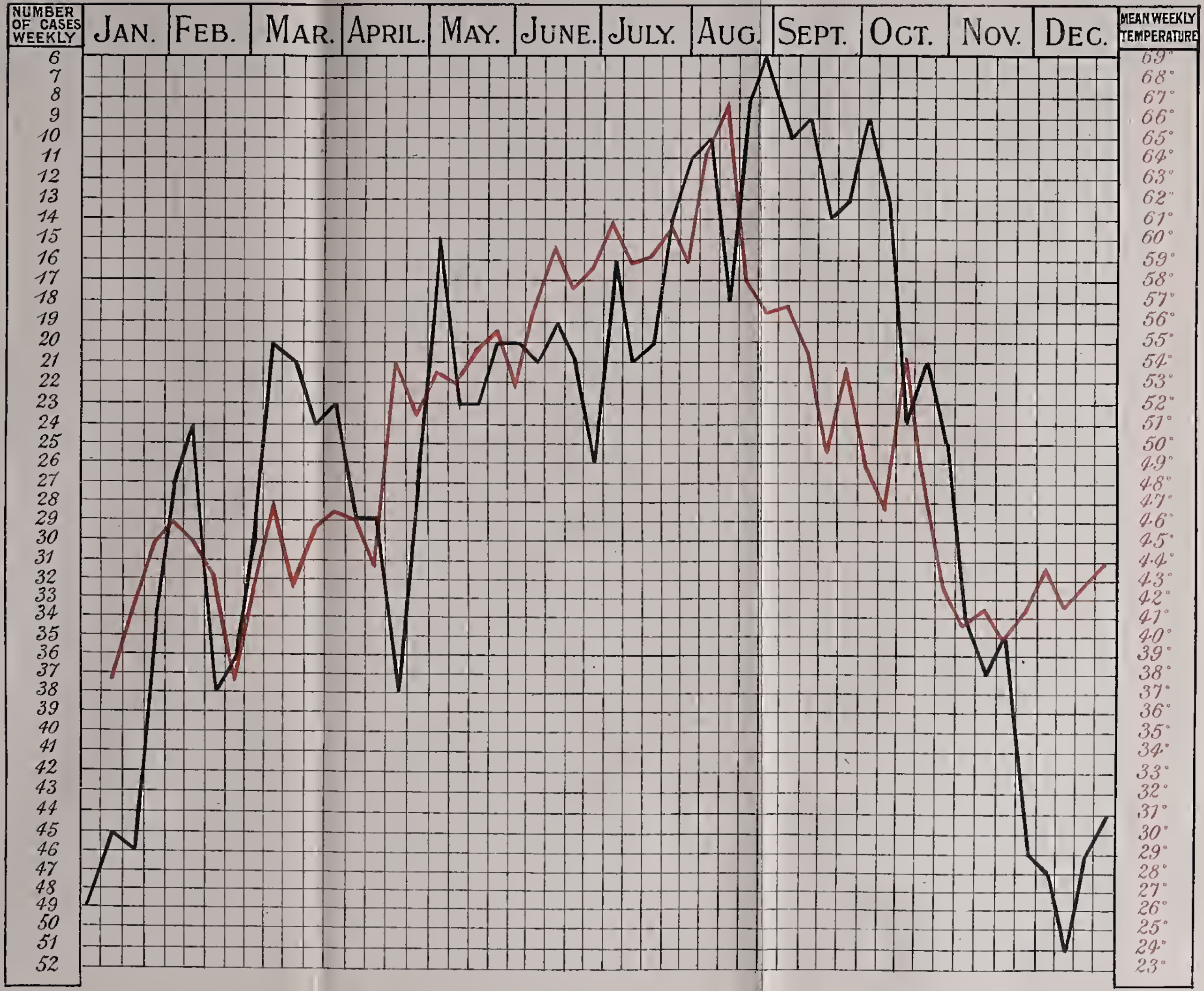
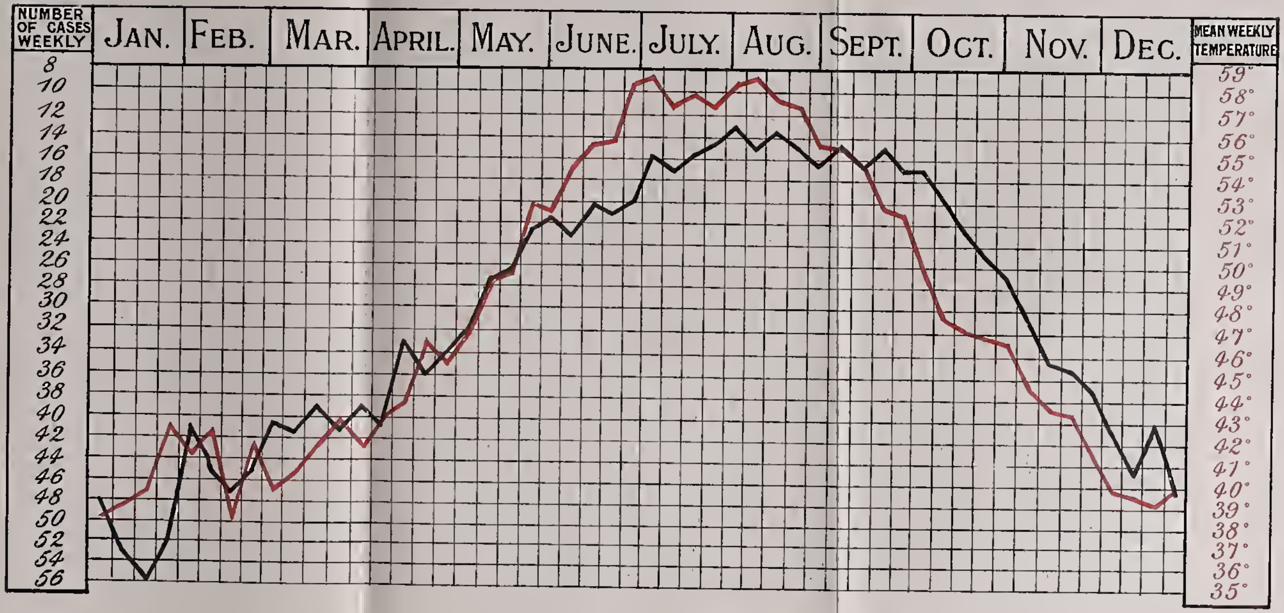


CHART V.

Chart showing relation existing between Decrease in Temperature and Increase in Mortality, from Diseases of the Respiratory Organs, during Thirteen Years ended 1893.

The Black Line shows the average Number of Cases weekly ; the Red Line the Mean Weekly Temperature.



CAUSES OF DEATH IN THE CITY OF DUBLIN IN 1893.

The total number of deaths recorded during the year was 7,139. Of those 839 were caused by the principal zymotic diseases. The previous year, 1892, was a very unhealthy year; the death-rate was largely raised by an epidemic of measles, and by the prevalence of influenza in the early part of the year. There were 726 fewer deaths in 1893 than in 1892.

Small-pox.—No death from small-pox has been registered in Dublin since March, 1888, and this disease has not been epidemic in Dublin since 1880.

Measles.—There was an epidemic of this disease, which prevailed from March to August, 1892, and then continued, but in a very mitigated form, during the rest of the year. In 1893 there were 81 deaths recorded from this disease, or 351 below the number in 1892.

Scarlet Fever.—Only 18 deaths were ascribed to scarlet fever, being 7 in excess of the number in 1892.

Typhus Fever.—11 fatal cases of this once very common disease were registered in 1892. This number was 3 in excess of that for 1892; only 3 deaths from typhus fever occurred in 1891. This disease was not many years ago very fatal in Dublin.

Whooping Cough.—This disease caused about the same mortality in 1893 as in 1892. In each year it was about the average for the previous 10 years.

Diarrhœa and dysentery were the most fatal diseases of the zymotic class in 1893. This was probably due to the high temperature and extreme dryness of the late summer and early autumnal months. They caused 347 deaths.

There were 12 deaths from diphtheria, as against four in 1892. In the latter year this disease was very fatal in London and some other English towns.

Bronchitis caused in the whole registration area 957 deaths, showing a great falling-off in the mortality due to this disease as compared with the previous year, in which the deaths numbered 1,334.

The total deaths from diseases of the organs of respiration (exclusive of phthisis) in 1893, was 1,642 ; in 1892 the number was 2,135. The deaths from these diseases in 1893 were in the ratio of 4·7 per 1,000 of the population, and was 16 per cent. below the average for the previous 10 years.

Phthisis is always a peculiarly fatal disease in Dublin. In 1893 it caused 1,288 deaths in the whole registration area, or in the ratio of 3·7 per 1,000 persons living. The deaths were 43 in excess of the mean annual number for the previous 10 years. In the city the rate was 3·94.

Phthisis is now regarded as a contagious disease, though not yet classed for registration purposes amongst zymotic diseases. It is always peculiarly fatal in Dublin. In 1893 it caused 968 deaths, which is slightly over the average of the previous 10 years. This disease is almost as fatal in the suburbs as in the City.

Diseases of the organs of respiration, exclusive of phthisis (bronchitis, inflammation of the lungs, &c.), caused 1,330 deaths, a number 573 less than in 1892, and considerably below the average for the previous 10 years.

This marked decrease in mortality from diseases of the organs of respiration was, no doubt, principally due to the fine weather which prevailed in the earlier part of 1893.

Although the deaths caused by influenza and its complications were rather numerous, they scarcely numbered one-third of the number registered in 1892.

The death-rate of Dublin is, unfortunately, high: a fact which I attribute chiefly, if not wholly, to the comparative poverty of the population. One-third of the people of Dublin live in single room tenements, in which they eat, drink, cook, sleep, and often carry on their work for a living.

The large proportion of the deaths amongst the Dublin population which occur in charitable institutions, is a clear proof of the poverty of a large proportion of the population. In 1893, 33·2 per cent. of the deaths took place in the workhouses and their infirmaries, and in the hospitals and lunatic asylums. In London, in 1892, only 29·9 per cent. of the deaths occurred in the workhouses, hospitals, and public lunatic and imbecile institutions.

The corrected death-rate for Dublin in 1893, was 28·2 per 1,000. This rate is 4·88 in excess of the mean rate of the 33 largest towns of England and Wales; but it is less than the rate in 3 of those towns, namely, Manchester, Preston, and Liverpool, in which the rates were as follows: Manchester, 28·21; Preston, 28·99; and Liverpool, 30·33.

With respect to the principal zymotic diseases, Dublin stands far better than it does in relation to its general death-rate. In 1893, the mean zymotic deaths in the 33 largest English towns, was 3·1 per 1,000 persons living. In London, the rate was 3·08; in Liverpool, 3·90; in Bolton, 4·65; in Manchester, 3·72; in Salford and Hull, 4·14; in Blackburn, 4·08; and in Preston, 6·1.

TYPHOID FEVER.

It is a general idea that typhoid fever prevails to a much greater extent amongst the upper than the lower classes; but in Dublin, at least, this is not the case, as will be seen by the following figures. The sickness-rate would be relatively higher than the death-rate in the professional and independent class, as compared with the hawkers, as they would be better able to resist the disease: that is, there would be a higher percentage of fatality in the cases amongst the lower classes than amongst the higher.

Return showing the Deaths from Typhoid Fever amongst six classes of the population, and the Typhoid Fever Death-rate per 100,000 *of each class during the years* 1892 *and* 1893.

CLASSIFICATION	Population	1892	1893	Total Number	Average Number	Deaths per 100,000 of the Population calculated on the average number
Professional and Independent Class	15,579	4	4	8	4	25·7
Middle Class ...	81,469	36	80	116	58	71·1
Artisan Class and Petty Shopkeepers	99,377	30	84	114	57	57·3
General Service Class	147,978	49	103	152	76	51·3
Inmates of Workhouse	5,191	3	5	8	4	77·0
Hawkers, Porters, Labourers, &c.	83,472	29	67	96	48	57·5

The number of deaths caused by typhoid fever, recorded in Dublin in 1893, exceeded the number registered in any previous year. The rainfall in 1893 was extremely small, and the summer was unusually warm and prolonged—meteorological conditions which, probably, were the causes of the excess of typhoid fever.

In 1893 a report on the prevalence of enteric fever in Dublin was issued under the auspices of the Dublin Sanitary Association.

The following gentlemen constituted the Committee who made the Report: Dr. C. J. Nixon, Dr. Emerson Reynolds, Mr. J. P. Maunsell, Mr. Thomas Drew, Dr. W. R. Graves, and four members of the Executive Committee of the Dublin Sanitary Association, namely, Dr. J. W. Moore, Dr. S. Woodhouse, Mr. R. O'B. Furlong, and Mr. F. W. Pim. This Committee subsequently co-opted Dr. E. D. Flinn, Dr. G. F. Duffey, Professor M'Weeney, and Mr. Jonathan Pim.

This Committee, on the 10th November, 1892, agreed upon and signed a Report. It will be seen by it that their investigations and deliberations extended over a long period. It is, however, stated that action upon the Report was delayed by the illness of the Secretary, and the Report presented to the Corporation is dated 1st June, 1893.

The Report states that the death-rate from typhoid fever is higher in Dublin than in any town in the United Kingdom, except Belfast. This fact had been already shown in my Annual Report, for 1891, of the Medical Officer of Health for Dublin. It is stated, on the authority of the Registrar-General, that the mortality caused by typhoid fever was 9·4 per cent. of the cases treated in the Dublin Hospitals. The Committee conclude from this that as there were 191 deaths in Dublin in 1891, there were probably 2,022* cases in Dublin, of "which 1,345 presumably belong to the city proper." This would then leave a balance of 677 cases for the suburbs and extra suburban districts. We are, however, more explicitly informed that of the 191 deaths from typhoid fever in Dublin in 1891, 127 were those of persons belonging to the city, 48 to the suburbs, and 16 to extra Dublin registration districts. Using round numbers, the population of the city is 250,000, and of the suburbs 100,000. Therefore, in 1891 the deaths from typhoid fever were in the ratio of 50·8 per 100,000 in the city and 48 in the suburbs. If, however, we take the ten years ended in 1892, the rate is less favourable to the city than the Committee have shown to be the case in 1891—the rate for the city being 45·52 per 100,000, and for the suburbs 36·6 per 100,000. But the suburban rate is much higher than the rate in London and many of the largest English towns, though the suburbs stretch from Rathgar to Coolock, and from Howth to Palmerstown. 250,000 persons live on 3,800 acres in the city, and another 100,000 reside on the 17,000 acres which constitute the suburbs. It is clear, then, that typhoid fever is not confined to the City of Dublin, but is spread throughout the suburbs, and even to the country districts beyond the suburbs; for, during the last five years, 53 patients from extra metropolitan registration districts died from typhoid fever in the Dublin hospitals.

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*Would not the proportion be 1,795, not 2,022 cases?

The Committee say that, according to the bacteriologists, the bacilli of typhoid fever flourish best in diluted sewage; therefore, that the water carriage system of sewage disposal facilitates the development of the infective germs. The contagion of the disease may be propagated by sewage containing the typhoid bacilli getting into water used for drinking, and stored in cisterns. Liquid and solid food may become infected by foul emanations getting into them. The Vartry water is exonerated from being a direct cause of typhoid fever; but it is pointed out that local contamination of the pipe-water may take place by storage of the water in foul cisterns. Milk has been found to be a vehicle for the virus of typhoid fever, and the Committee think that the state of the dairy-yards not being satisfactory, dangerous filth from them might get into the milk stored in them.

The Committee consider that while ventilation of water-closets and bath waste pipes is now very general, scullery sinks are imperfectly guarded against the entrance of sewer gases into houses.

I do not think that Dublin is worse off in this respect than other towns, for in the reports of Health Officers and sanitarians the defective state of scullery sinks is a common topic.

The eminent Sanitary Engineer, Mr. Rogers Field, states that out of 1,000 houses which he examined, 3 only were sound from a sanitary point of view. For every 100 houses examined by the Edinburgh Sanitary Association, 90 per cent. had their drains in direct connection with the interior of the houses, 80 per cent. had faulty storage arrangements, and 15 per cent. had their water cisterns in direct connection with the sewers.

The Committee say infected clothing may convey the contagion, but this can be no more a common cause of the disease in Dublin than elsewhere.

The Committee are of opinion that the drains of houses in which cases of typhoid fever have appeared during the recent epidemic, have in *most* cases proved faulty when properly tested.

The Committee assign as the principal cause of the undue prevalence of typhoid fever in Dublin, the condition of the ground, or sub-soil water. Before the introduction of the Vartry water, not only was that supplied by the Grand and Royal Canals used, but the wells in the city were largely resorted to. Now the wells are no longer used, and some of the abundant supply of Vartry water finds its way into the soil. The latter has therefore become full of stagnant water. It is asserted that the bacillus of typhoid fever does not live long in concentrated excreta, but, on the contrary, flourishes when the excreta becomes broken down and diluted with water. The Committee believe that there is a vast quantity of foul water in the sub-soil of Dublin, and that it is of the proper dilution to encourage the development of the typhoid bacilli.

They urge the absolute necessity of an efficient system of sub-soil drainage, and say that typhoid fever has increased since the introduction of the Vartry water; and as the water is not chargeable with the disease, the steady increase of typhoid fever must be due to the stagnant state of the ground water, consequent on the cessation of pumping. The Committee give the results of a number of analyses made of the ground water, but no typhoid bacillus has been found in it, nor perhaps was looked for. It is alleged that the sub-soil drainage of the grounds of Trinity College has prevented the development of typhoid fever amongst the students of that Institution.

The Committee say that a wet season, if a warm one, is productive of a large enteric death-rate in the city and suburbs (as was the case in 1891), whilst a dry, hot season proves particularly dangerous to the "water-logged portions of the city"—It is not stated what parts of the city are water-logged, but it is well known that they are believed to be the parts which have the least elevation above the sea level, and the nearest to the river.

The Committee say that in order to diminish the high typhoid death-rate, the pollution of the ground water must be lessened and its level lowered. 1893 was an unusually dry year, and one would expect that the effect of this would be to lower the level of the ground water; but typhoid fever was more than usually fatal in 1893.

The theory of the Committee depends on the assumption of the so-called typhoid bacillus being the real direct cause of typhoid fever: it has recently been stated by Dr. Klein, the most eminent bacteriologist in England, that this is open to doubt.

It cannot be denied that the sanitary condition of the houses in Dublin has been improved substantially during the last 20 years, and various alleged sources of typhoid fever—such as filthy dairy-yards, foul water cisterns, &c.—were more frequently met with a quarter of a century ago than at present. It seems very probable then that typhoid fever has become endemic in Dublin of late years, just as diphtheria, notwithstanding all the great hygienic improvements in London, is increasing in that city, and indeed in many others.

In many American cities which formerly had little or no typhoid fever, that disease has of late years been steadily increasing.

Typhoid fever seems to have become a kind of malarial disease in Dublin, and to have established itself in the soil; it may not, as the Committee say, thrive in solid excreta, but in diluted excreta. Dublin was, until of late years, chiefly a midden city, and no doubt large quantities of solid and liquid excreta found their way into the soil and sub-soil. The dissolution and distribution of this matter throughout the soil in the form of dilute sewage would be favourable to the development of typhoid bacilli. The removal of the sewage by drainage would cause its replacement by a less impure liquid, for owing to the water-closet carriage of excreta, the direct pollution of the soil has been enormously lessened.

By far the most important part of the Committee's Report is that which refers to the drainage of the sub-soil. The whole drift of the Report is to prove that the chief cause of the undue amount of typhoid fever in Dublin is the presence of a large quantity of foul water in the soil: if this were got rid of, the amount of typhoid fever would be substantially lessened.

Before entering upon a big engineering scheme for the drainage of the sub-soil, it appeared to be desirable that the actual condition of the soil as regards water should be ascertained. The Public Health Committee resolved to carry out a suggestion that I had made on several occasions, namely—to sink wells for the purpose of ascertaining the height of the ground water. They say:

"We feel that the facts relied upon by the Committee as proving that the bad condition of the soil is the cause of much typhoid are very strong, but we believe that before any extensive pumping operations should be undertaken, the facts relating to the height and fluctuations of the ground water should be determined. It has been several times suggested by the Superintendent Medical Officer that these facts ought to be ascertained; but it has only been within the last four months that we have taken steps for the purpose of doing so. Seven wells were sunk at the following places :—Marrowbone-lane, rere of Mansion House, Dawson-street, Fishamble-street, Hanover-quay, Essex-quay, Stanley-street, and Portland-row." Frequent examinations of the height of water in these wells have been made since the 21st September last, and the water taken from them has been examined. It is noteworthy that, at Hanover-quay, the least distance of the water from the surface of the ground has been 15 feet, and the greatest distance 16 feet 8 inches. During the two months the movement of the water has been through a space of 20 inches. The surface of the ground at this point is 24 feet above the Ordnance datum (low tide). At Marrowbone-lane, where the ground rises 68 feet above the Ordnance datum, the water rose in the well to a height of 7 feet 3½ inches from the surface, and never sank lower than 7 feet 7¼ inches. In this case the fluctuation in the height of the ground water was limited to 3¾ inches. At Stanley-street well, the greatest depth from the surface was 5 feet 10 inches, and the least 5 feet 7½ inches—difference, 2½ inches. Here the ground surface is 52 feet above the datum. At Fishamble-street, about 30 feet over datum, the water came to within 6 feet 10½ inches of the surface, and sank to 7 feet 4 inches. At the Mansion House, about 40 feet above datum, the water rose to within 8 feet 9 inches, and fell to 9 feet 5½ inches. At Portland-row the water came to within 8 feet 2 inches of the surface, but in November the well (12 deep) dried up. Here the ground is only 23 feet above Ordnance datum. These results, so far as they go, show that, on the whole, the water comes nearer to the surface of the ground at the highest points of the city. This seems due to the fact that the clay prevails there, whilst the gravel lies low. Fishamble-street well, which is near the river, is still in the clay. The well at Essex-quay was not sunk until late in December. The depth of its water from the surface was then about 10 feet. This well is in the gravel at Essex-quay 19½ feet above the datum line.

The fluctuations in the height of the ground water were as follows:—

Wells in the Clays.

Marrowbone-lane,	...	4¼ inches.
Stanley-street	...	2½ ,,
* Mansion House	...	1 foot 4 inches.
Fishamble-street	...	6 inches.

Wells in the Gravels.

† Portland-row	...	3 feet 10 inches.
Hanover-quay	...	1 foot 5 ,,
Essex-quay	...	in 1894 it fluctuated about 2 feet.

Essex-quay well was not sunk till late in December.

There is a greater movement in the air of the gravels than in that of the clays, and a much larger volume of air exists in the former. The typhoid bacillus is an ærobian organism, *i.e.*, requires air, and consequently can exist to a greater extent in the gravels than in the clays. The slight movement of the water in the Stanley-street well is evident, from the fact that it remained exactly at the same height at all the observations taken from 30th September to the 29th November.

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* There appears to be a small spring at this well which affects the height of the ground water.

† This well was only 12 feet, and it remained dry for several months. On the 18th April, 1894, the water in it rose to within 9 feet 3½ inches from the surface, but on the 28th May it sank to 11 feet 5 inches.

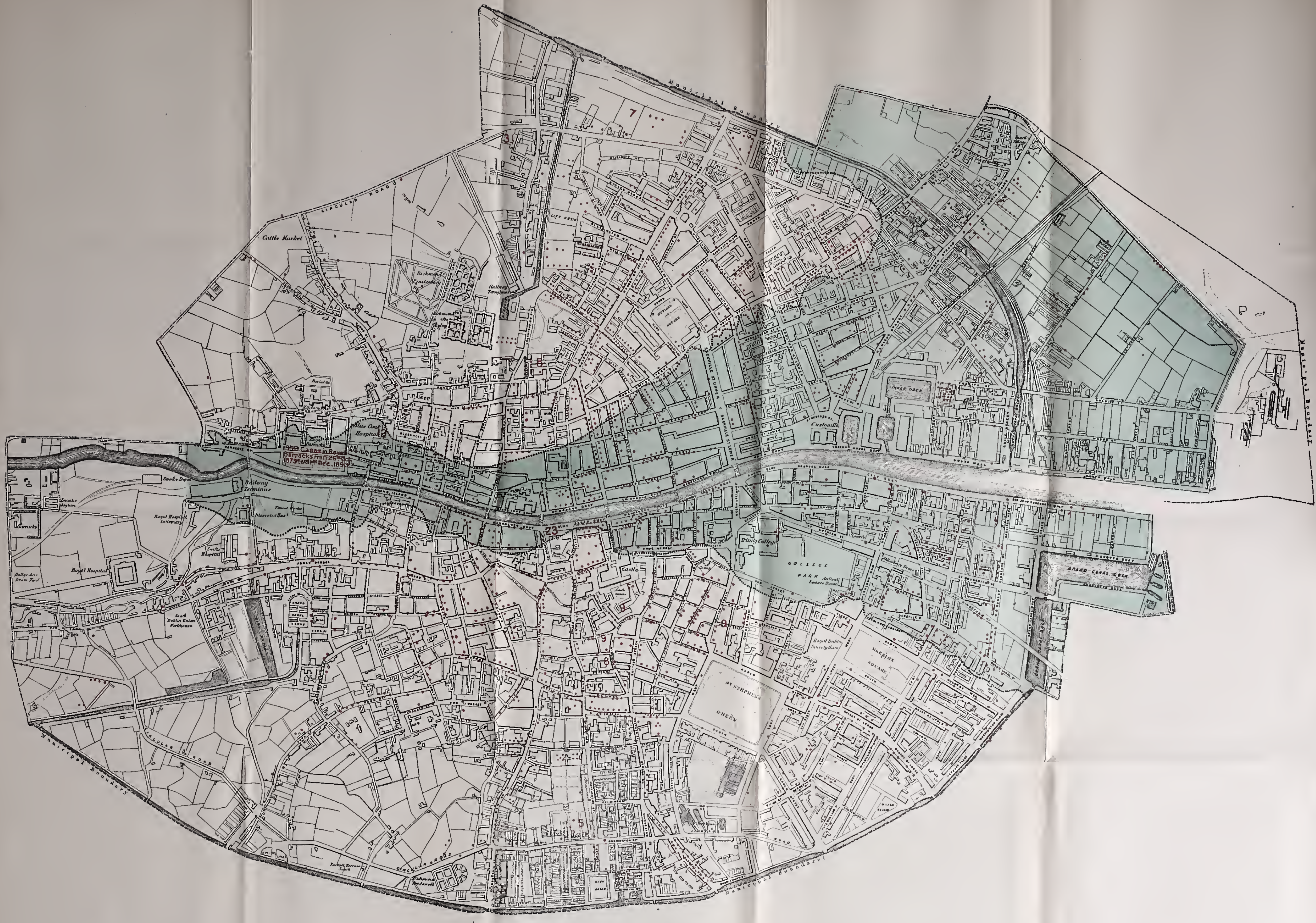
The broad facts established by this investigation are :—
1st. That the part of Dublin supposed to be water-logged, *i.e.*, that lying nearest to the River Liffey, is the dryest part. At Essex-quay, which is only 19½ feet above the Ordnance datum line (the mean height of the sea), the ground water was 10 feet 2 inches from the surface at high water in the river on the 4th May, 1894.

This well is situated in the gravel, but at a few feet distance the water in the well in Fishamble-street, which is in the clay, stood at the depth of 6 feet 8 inches from the surface of the ground.

OBSERVATIONS ON THE HEIGHT OF GROUND-WATER IN DUBLIN WELLS IN 1893.

The figures show the depth of the surface of the Water in feet and inches from the surface of the ground.

Date of Observation	Wells in the Clays.								Wells in the Gravels.					
	Marrowbone-lane, height of ground, 68 ft. above datum line		Stanley-street, 52 ft. above datum		Mansion House, 43 ft. above datum		Fishamble-street, 30 ft. above datum		Portland-row, height of ground above Ordnance datum 23⅓ feet		Hanover-quay, height of ground above Ordnance datum 24 feet		Essex-quay, height of ground above Ordnance datum 19½ feet	
	feet	inches	feet	inches	feet	inches	feet	inches	feet	inches	feet	inches	feet	inches
September, 21, 1893	7	4½	5	8	9	5	7	2	8	5	15	0	Sunk late in December, 1893.	
„ 22 „	7	5½	5	9	9	5½	7	1½	8	5	15	5		
„ 23 „	do		5	8½	9	6	7	1	8	5¼	15	6		
„ 25 „	7	5	5	9	9	3	7	0	8	6	15	9		
„ 26 „	7	5¼	...		9	2	7	0	8	5	...			
„ 27 „	7	5½	5	9	9	0½	7	0	10	2 H.W.	16	2		
„ 28 „	7	6	5	9½	8	9½	7	2	10	0 H.W.	15	10		
„ 29 „	7	7	5	8½	8	9	7	1	8	3 H.W.	15	6		
„ 30 „	7	6¼	5	9	8	9¼	7	1	8	5	15	10½		
October 2 „	7	6¾	do		8	9	7	2	8	4	15	5		
„ 3 „	7	6½	do		do		7	2	8	3	15	2		
„ 5 „	7	6	do		8	9½	7	2½	8	2	15	6		
„ 6 „	7	7	do		8	10	7	2½	8	2½	15	10		
„ 7 „	7	7¼	do		8	10½	7	3½	8	3	15	6		
November 24 „	7	5	do		9	5	6	10	Dried up		16	0		
„ 25 „	7	2¾	do		do		7	0	do		16	5		
„ 27 „	7	5	do		do		7	3	do		16	3		
„ 28 „	7	6	do		9	2	do		do		16	4		
„ 29 „	7	5½	do		do		7	4	do		do			
„ 30 „	7	6	5	9½	8	10	do		do		do			
December 1 „	do		5	10	do		7	3	do		16	8		
„ 2 „	do		do		do		do		do		16	6		
„ 4 „	do		do		do		7	4	do		16	8		
„ 5 „	do		do		8	8	7	2½	do		do			
„ 6 „	7	4	do		8	6	7	0	do		16	0		
„ 7 „	do		5	8½	8	5	do		do		15	8		
„ 9 „	7	3½	do		8	3	do		do		16	0		
„ 12 „	...		5	7½	8	2	6	10½	do		15	7		



THE RED MARKS INDICATE THE PLACES IN THE CITY OF DUBLIN IN WHICH CASES OF TYPHOID FEVER OCCURRED DURING THE YEARS 1882-1893 INCLUSIVE. THE PORTION COLORED GREEN IS GRAVEL ALL OUTSIDE IS CLAY.

The Ordnance datum line is 8·094 feet below the mean sea level. It refers to the low water of spring-tide observed in Dublin Bay, on 8th April, 1837.

In my Annual Report for 1891, I gave a map showing the distribution of 1,988 cases of typhoid fever in Dublin. I pointed out that on the gravels the ratio of cases to the population was 1 in 92·8, and on the clays, 1 in 145·3. This proved that the clays were safer to live on as far as typhoid fever was concerned. I expressed my belief that these facts appeared to show that the organisms that produce typhoid fever escape into the air more readily from the gravels than the stiff and usually moist clays.

In my present Report I give a map showing the distribution of 3,461 cases. The difference between the gravel and the clays, though shown very decidedly, is not so marked as in the map of 1891. This is probably due to the exceptionally hot and dry year of 1893, in which the superficial layers of the clays dried to a greater extent than usual, and permitted of the escape of the typhoid organisms.

	Population of the City of Dublin by 1891 Census	Per Cent.	No. of persons affected by Typhoid Fever in 12 years ended 1893	Per cent. of total number of cases	Ratio of Cases to Population
Living upon Gravel Soils	75,486	30·7	1,292	37	1 in 58·5
Living upon the clay	169,615	69·3	2,169	63	1 in 78·2
Total ...	245,001		3,461	100	1 in 70·7

Table showing Deaths from Typhoid Fever in the Metropolitan Registration Area, in each Quarter of the Years in Ten Years up to 1893; also Rainfall and mean Temperature.

Year	Deaths from Typhoid Fever				Rainfall				Mean Temperature			
	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	1st Qr.	2nd Qr.	3rd Qr.	4th Qr
1893	75	40	70	91	5·72	4·93	6·29	5·46	42·2	53·5	58·2	44·2
1892	30	14	21	57	5·01	7·41	8·33	7·20	38·1	50·2	55·3	42·3
1891	36	20	30	105	2·71	6·04	8·59	9·03	40·2	49·6	56·7	43·2
1890	58	32	32	63	6·33	4·84	7·22	7·11	42·3	50·6	56·1	44·0
1889	48	38	41	101	4·89	4·36	9·96	7·77	40·6	50·8	56·3	44·7
1888	36	30	32	65	6·09	6·01	5·87	10·68	39·5	51·2	56·0	46·3
1887	37	24	29	43	3·84	3·60	4·22	5·63	41·3	52·8	58·7	42·7
1886	33	19	27	51	7·29	8·28	5·69	11·69	39·3	50·8	58·6	44·8
1885	32	40	24	46	5·95	6·94	7·06	6·64	41·7	50·4	56·8	44·1
1884	27	28	28	46	7·73	4·13	4·34	4·25	44·3	52·3	59·3	44·8
Total	412	285	334	668	55·56	56·54	67·57	75·46	409·5	512·2	572·0	441·1
Means	41·2	28·5	33·4	66·8	5·556	5·654	6·757	7·546	40·95	51·22	57·20	44·11

Thus it will be seen that of the 1,699 deaths, 16·8 per cent. were registered in the second quarter; 19·7 per cent. in the third; 24·2 per cent. in the first; and 39·3 per cent. in the fourth quarter.

MORTALITY OF CHILDREN.

The general death-rate in Dublin and other towns is largely swelled by the high mortality which prevails amongst children, and more especially the children of the poor. Maladies such as measles and whooping-cough, which rarely kill children who are well fed, housed, and cared for, cause immense ravages amongst the children who dwell in miserable tenements, who are badly fed, and who are insufficiently protected from cold and wet.

In my Report for 1892, I dealt at considerable length with this subject, and pointed out the appalling mortality which prevailed amongst the children of the porters, hawkers, labourers, &c.

Infant mortality was higher in former years in Dublin than it has latterly been, but it is still excessive, as will be seen by the following table :—

Death-rate of Children under One Year of Age in the Year 1893.

	All England and Wales	33 Largest English Towns	London	Dublin
To 1,000 of the estimated population under one year of age	159	181	165	183
To 1,000 of the estimated population of all ages ...	4·9	5·8	5·1	5·1
To 1,000 births registered	159	181	164	179
To 1,000 deaths registered	255	268	239	197

The general death-rate in 1893 was much lower than it was in 1892, yet the mortality of children under one year old was exactly the same in each year. The deaths of children under one year of age, constituted, in 1892, 17·5 per cent. of the total deaths, whilst in 1893 they made up 19·7 per cent. of the total deaths. The saving of life in 1893, as compared with the previous year, was confined to persons aged one year and upwards. The exceptionally high temperature of 1893 may account for the fact that infant life alone did not benefit by the general salubrity of the year.

As compared with the 33 largest English towns, Dublin stands favourably, the deaths per 1,000 births being 2 less. In 1892 they were 15 in excess of the English town rate.

CORRECTED DEATH-RATE FOR DUBLIN.

As pointed out in previous Annual Reports, the recorded death-rates of towns require to be corrected for age and sex distribution. Females live longer than males. It follows, therefore, that if two towns were in an equally healthy state, but that one of them contained a larger proportion of females than the other, the town with the lower proportion of females would have the higher death-rate. Similarly, a town, a large proportion of the inhabitants of which were at the most favourable periods of life, would have a lower death-rate than a town equally healthy, in which the ages of the population were less favourable to longevity. The death-rate at different ages in the whole of England and Wales being ascertained, the Registrar-General of those countries corrects the recorded death-rates in the towns in which the ages of the population vary from those of the country at large. Norwich and Plymouth were the only towns in which it was necessary to reduce the crude or recorded death-rate; in all the other towns it was necessary to increase it, and in some, like Manchester, very largely. In Dublin the ages of the population are favourable as regards longevity, and in Belfast they are even more so. I have corrected the recorded death-rates for Dublin, Belfast and Cork, and find them to be as follows:—

	Recorded Death-rate	Corrected Death-rate
Dublin	26·0	28·2
Belfast	25·8	30·6
Cork	24·5	26·8

CAUSES OF DEATH IN YEARS 1883-93, WITH THE NUMBER OF DEATHS TO EVERY 10,000 PERSONS LIVING DUBLIN METROPOLITAN AREA. *(Registrar-General's Return.)*

Names of Diseases	Number of Deaths Registered																Number of Deaths from each Disease to every 10,000 persons living.		Names of Diseases
	1883 (52 weeks)	1884 (53* weeks)	1885 (52 weeks)	1886 (52 weeks)	1887 (52 weeks)	1888 (52 weeks)	1889 (52 weeks)	1890 (53* weeks)	1891 (52 weeks)	1892 (52 weeks)	Yearly Average 1883-92	1893					Yearly Average	1893 (52 weeks)	
												TOTAL (52 weeks)	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter			
Zymotic Diseases																			Zymotic Diseases.
Small-pox	.	.	2	.	1	1	.	.	.	.	.	.	.	.	.	.	0·0	0·0	Small-pox
Measles	27	23	296	9	514	90	112	106	5	472	165	103	10	38	24	31	4·7	2·9	Measles
Scarlatina	179	369	178	184	260	170	33	8	4	21	141	25	5	9	3	8	4·1	0·7	Scarlatina
Typhus	141	83	54	39	24	31	18	25	8	9	43	16	7	4	2	3	1·2	0·5	Typhus
Sim. contin. & ill-defined Fever,	37	38	39	25	33	25	12	9	3	7	23	13	4	6	2	1	0·7	0·4	Sim. cont. & ill-defined Fever
Enteric Fever	132	134	144	129	135	168	228	185	191	122	187	276	75	40	70	91	4·5	7·9	Enteric Fever
Whooping Cough	333	132	191	246	159	273	119	187	159	155	195	191	30	56	43	62	5·6	5·4	Whooping Cough
Diphtheria	14	39	27	30	36	32	8	24	23	12	24	34	14	6	8	6	0·7	1 0	Diphtheria
Cholera	7	11	4	12	14	6	12	8	5	18	10	31	—	1	27	3	0·3	0·9	Cholera
Diarrhœa, Dysentery	237	345	190	283	460	212	299	184	211	227	265	447	15	47	328	57	7·6	12·7	Diarrhœa, Dysentery
Other Zymotic Diseases	140	169	192	143	220	222	216	283	256	457	230	397	95	101	87	114	6·6	11·4	Other Zymotic Diseases
Total,	1247	1343	1317	1100	1856	1230	1057	1019	865	1500	1253	1533	255	308	594	376	36·0	43·8	Total
Parasitic Diseases	7	16	17	10	15	6	10	14	6	8	11	9	1	3	1	4	0·3	0·3	Parasitic Diseases
Dietetic Diseases	33	28	25	25	32	35	32	27	33	40	31	33	13	6	9	5	0·9	0·9	Dietetic Diseases
Constitutional Diseases																			Constitutional Diseases
Phthisis (Pulm.)	1330	1301	1273	1279	1269	1136	1198	1292	1200	1288	1257	1298	374	335	289	300	36·2	37·1	Phthisis (Pulm.)
Other Constitutional Diseases	846	865	869	913	895	777	886	885	889	995	882	908	243	235	226	204	25·3	26·0	Other Constitutional Diseases
Total,	2176	2116	2142	2192	2164	1913	2084	2177	2089	2283	2139	2206	617	570	515	504	61·5	63·1	Total
Developmental Diseases	708	708	692	704	701	676	710	753	718	718	709	680	192	185	136	167	20·4	19·5	Developmental Diseases
Local Diseases Diseases of																			Local Diseases. Diseases of
Brain & Nervous System	1462	1452	1496	1434	1550	1238	1398	1261	1271	1221	1378	1065	270	278	289	228	39·6	30·4	Brain & Nervous System
Organs of Special Sense	3	6	6	3	6	9	3	7	6	4	5	5	3	2	—	—	0·1	0·1	Organs of Special Sense
Circulatory System	647	627	571	597	662	622	607	726	759	793	661	705	195	182	140	183	19·0	20·2	Circulatory System
Respiratory System	2131	1792	2055	1766	2169	1769	1685	2049	1986	2135	1954	1642	520	385	217	520	56·1	47·0	Respiratory System
Digestive System	477	503	499	502	559	474	469	464	478	499	492	533	123	144	136	130	14·1	15 2	Digestive System
Lymphatic System, &c.	3	7	5	7	4	7	6	3	6	8	6	10	2	2	6	—	0·2	0·3	Lymphatic System, &c.
Urinary System	154	147	190	202	170	174	174	192	184	176	176	227	64	48	51	64	5·1	6·5	Urinary System
Generative System	17	21	18	27	25	22	25	24	30	29	24	41	14	11	5	11	0·7	1·2	Generative System
Accidents of Childbirth	23	28	48	37	26	37	28	27	32	37	32	37	11	11	8	7	0·9	1·1	Accidents of Childbirth
Dis. of Locomotive System	43	33	34	25	27	22	18	25	27	25	28	29	11	7	6	5	0·8	0·8	Dis. of Locomotive System
Dis. of Integumentary ,,	30	35	14	13	24	25	25	23	37	39	27	27	5	6	5	11	0 8	0·8	Dis. of Integumentary ,,
Total,	4990	4651	4936	4613	5222	4399	4438	4801	4816	4966	4783	4321	1218	1076	863	1164	137·4	123·6	Total
Violent Deaths	238	226	230	238	238	202	229	220	206	222	224	218	54	42	52	70	6·4	6·2	Violent Deaths
Deaths from ill-defined and Unspecified causes	762	664	663	609	554	433	493	443	462	477	556	409	102	93	119	95	16·0	11·7	Deaths from ill-defined and Unspecified causes‡
Deaths from all causes	10161	9802	10022	9491	10777	8894	9053	9454	9195	10214	9706	9409	2152	2283	2289	2385	278·9	269·1	Deaths from all causes
Annual Death Rate per 1,000 of the Population	29·1	28·4	28·4	26·9	30·5	20·5	25·6	26·8	26·3	29·2	27·9	26·9	28·1	26·1	26·2	27·3	—	—	Annual Death Rate per 1,000 of the Population
Mean Temperature of the Air (Fahrenheit)	47·5°	49·6°	49·6°	47·2°	47·5°	47 2°	48·1°	48·3°	47·4°	46·5°	47·8°	49·5°	42·2°	53·5°	58·2°	44·2°	—	—	Mean Temperature of the Air (Fahrenheit)

Table showing by certain Age-periods the Population of the Dublin Registration District in 1891, *the Number of Deaths registered in each of the years* 1883-93, *and the proportion which the Deaths at each Age-period bear to the Population at the same age. (From Registrar-General's Return.)*

YEARS, &c.		AGES							
		ALL AGES	Under 20 years			20 and under 40	40 and under 60	60 and under 80	80 and upwards
			Under 5 years	5 and under 20	Total				
Population in 1891		349594	37003	101853	138856	119890	65265	23765	1818
Number of Deaths Registered	Year 1883 ..	10161	3018	911	3929	1694	2048	2065	425
	,, 1884* ..	9802	3127	933	4060	1673	1820	1864	385
	,, 1885 ..	10022	3294	896	4190	1597	1885	1973	377
	,, 1886 ..	9491	2926	795	3721	1555	1899	1925	391
	,, 1887 ..	10777	3923	898	4821	1530	1923	2108	395
	,, 1888 ..	8894	2843	787	3630	1416	1598	1813	437
	,, 1889 ..	9053	2834	771	3605	1460	1790	1811	387
	,, 1890* ..	9454	2654	722	3376	1614	1949	2093	422
	,, 1891 ..	9195	2579	662	3241	1537	1897	2031	489
	,, 1892 ..	10214	3208	740	3948	1552	2068	2200	446
	Yearly average, 1883-92 ..	9706	3041	811	3852	1563	1888	1988	415
	Year **1893** ..	9409	2830	777	3607	1657	1886	1849	410
	1st Quarter, 1893	2452	561	217	778	458	545	552	119
	2nd ,, ,,	2283	629	218	847	400	475	449	112
	3rd ,, ,,	2289	930	162	1092	357	376	391	73
	4th ,, ,,	2385	710	180	890	442	490	457	106
Number of Deaths at each Age-Period to every 1,000 Persons living at same Age†	Year 1883 ..	29·1	80·1	9·1	28·6	13·9	31·7	86·3	255·1
	,, 1884* ..	27·9	82·5	9·3	29·5	13·7	28·0	77·1	230·1
	,, 1885 ..	28·4	86·4	8·9	30·2	13·0	28·8	81·1	224·1
	,, 1886 ..	26·9	76·7	7·9	26·8	12·6	29·0	79·2	232·5
	,, 1887 ..	30·5	102·9	8·9	34·8	12·4	29·4	86·7	234·8
	,, 1888 ..	25·2	74·6	7·8	26·2	11·5	24·4	74·6	259·8
	,, 1889 ..	25·6	74·3	7·7	26·0	11·9	27·4	74·5	230·1
	,, 1890* ..	26·8	69·6	7·2	24·4	13·1	29·8	86·1	250·9
	,, 1891 ..	26·3	68·6	6·5	23·3	12·8	29·1	85·5	269·0
	,, 1892 ..	29·2	86·7	7·3	28·4	12·9	31·7	92·6	245·3
	Yearly average, 1883–92 ..	27·9	80·2	8·1	27·8	12·8	28·9	82·4	243·2
	Year **1893** ..	26·9	76·5	7·6	26·0	13·8	28·9	77·8	225·5

Ages. Of the 9,409 deaths registered during the year, 2,830, or 30 per cent., were of children under five years of age, and 2,259, or 24 per cent., were of persons aged 60 years and upwards, including those of 1,202 persons aged 70 years and upwards, of whom 52 were stated to have been nonagenarians, and 2 (a man and a woman) were returned as centenarians.

The deaths of infants under 1 year old were equal to 180 for every 1,000 births registered, against 180 in the preceding year, and 166 in 1891.

Occupations. The Table on page 47 exhibits the occupations or social position of the persons whose deaths were registered during the year, the various callings being grouped in classes and orders, so as to show the respective rates of mortality in the several social grades of the population. From this Table it will be observed that the deaths in families of the "Professional and Independent Class," were equal to a rate of 21·6 per 1,000 of the persons in that class according to the Census of 1891; in the "Middle Class," the death-rate was 20·3 per 1,000; among the "Artisan Class and Petty Shopkeepers," it was 22.5; and in the "General Service Class," and the "Inmates of Workhouses," combined, it was 33·8. The number of the living in each of the several classes and orders of occupations in 1891 is shown by age-periods in the following Table:—

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* See note (*), p. 44.

† The Rates for the years 1883-90 are based on the estimated population as adapted in the Weekly Returns for each year; those for 1891, 1892 and 1893 on the population as shown by Census of 1891.

Table showing by Ages, in Five General Classes and Eighteen Groups, the Occupations or Social Position of the Inhabitants of the Dublin Registration District in 1891. *(From Registrar-General's Return.)*

Class	OCCUPATION OR SOCIAL POSITION [The 24,901 persons returned under the head "Unspecified" in Table 91 of the General Report on the Census have been distributed *pro rata* among the several groups to which they most probably belonged]	Population in each Class and Group in 1891	Ages						
			Under 5 years	5 and under 15	15 and under 20	20 and under 40	40 and under 60	60 and under 80	80 and upwards
	All Persons	349594	37003	65989	35864	119890	65265	23765	1818
	CLASSES								
	Families of the—								
I.	Professional and Independent Class	15579	1384	2539	1106	4437	3752	2127	234
II.	Middle Class	81469	8003	15126	9060	28815	14532	5506	427
III.	Artisan Class and Petty Shopkeepers	99377	10996	20525	10356	32244	18884	5968	404
IV.	General Service Class	147978	16305	27497	15238	53467	26655	8245	571
V.	Inmates of Workhouses	5191	315	302	104	927	1442	1919	182
I.	PROFESSIONAL AND INDEPENDENT CLASS.								
	1. Clerical, Medical and other Professions; Naval and Military Officers; and Heads of Public Departments	7989	734	1330	492	2414	2042	901	76
	2. Merchants and Manufacturers; Higher Class ..	1857	241	485	138	439	404	139	11
	3. Persons of Rank and Property not otherwise described	5733	409	724	476	1584	1306	1087	147
II.	MIDDLE CLASS								
	4. General Body of Officials—Civil Service, Banking, &c.	5877	747	1165	545	2009	1077	326	8
	5. Traders (except Petty Shopkeepers), Business Managers, &c.	26036	3528	6387	1552	7323	5577	1594	75
	6. Clerks and Commercial Assistants	25001	2395	3787	4385	10977	2885	552	20
	7. Miscellaneous—including all Householders in Second Class Localities, not included in above ..	24555	1333	3787	2578	8506	4993	3034	324
III.	ARTISAN CLASS AND PETTY SHOPKEEPERS								
	8. Working Engineers, Engravers, Printers, Watchmakers and Jewellers	7431	1095	1677	845	2519	1094	194	7
	9. Building and Furnishing Trades	26294	3868	6813	1926	7800	4629	1198	60
	10. Clothing Trades	23927	1427	3167	3800	9192	4646	1598	97
	11. Food Supply Trades	7949	1066	1824	708	2692	1352	296	11
	12. Other Trades and Callings ranking with Trades ..	26937	2861	5758	2432	8024	5462	2202	198
	13. Petty Shopkeepers	6839	679	1286	645	2017	1701	480	31
IV.	GENERAL SERVICE CLASS								
	14. Army, Police, Postal Delivery and Prison Services, &c.	13729	1521	1945	1922	5936	1701	657	47
	15. Domestic Servants	39967	1271	3090	6057	18694	7849	2792	214
	16. Coach and Car Drivers, Vanmen, &c.	10810	1868	2580	597	3616	1835	304	10
	17. Hawkers, Porters, Labourers, &c.	83472	11645	19882	6662	25221	15270	4492	300
V.	INMATES OF WORKHOUSES								
	18. Workhouse Inmates	5191	315	302	104	927	1442	1919	182

Table showing, in Five General Classes and Eighteen Groups, the Occupations or Social Position of the Persons whose Deaths were registered in the Dublin Registration District during the 52 Weeks ending Saturday, 30th December, 1893; the Death-rate represented by the Deaths registered; the Number of Deaths at each of Six Periods of Life, and the Number from each of the Principal Causes of Death. (From Registrar-General's Return.)

Class	Occupation or Social Position [The 24,901 persons returned under the head "Unspecified" in Table 91 of the General Report on the Census have been distributed *pro rata* among the several groups to which they most probably belonged.]	Population in each Class and Group in 1891	Death-rate per 1,000 of the Population in 1891	Total Number of Deaths	Under 5 Years	5 and under 20	20 and under 40	40 and under 60	60 and under 80	80 and upwards	Small-pox	Measles	Scarlatina	Typhus	Whooping-cough	Diphtheria	Simple continued & Ill-defined Fever	Enteric Fever	Diarrhœa, Dysentery	Total	Phthisis	Convulsions	Diseases of the Respiratory System	Violence (Accidental, Homicidal, and Suicidal)	Other Causes
			REGISTRATION OF DEATHS, YEAR (52 WEEKS) ENDING SATURDAY, 30TH DECEMBER, 1893.																						
					AGES						CAUSES OF DEATH														
											Principal Zymotic Diseases														
	ALL PERSONS	349594	26·9	9409	2830	777	1657	1886	1849	410	..	103	25	16	191	34	13	276	447	1105	1298	568	1642	218	4578
	CLASSES.																								
	Deaths in the Families of the—																								
I.	Professional and Independent Class	15579	21·6	337	27	9	36	74	133	58	..	1	1	..	1	3	2	4	9	21	19	2	44	4	247
II.	Middle Class	81469	20·3	1654	347	144	322	326	381	134	..	14	8	1	14	13	2	80	86	218	217	57	242	31	889
III.	Artisan Class and Petty Shopkeepers	99377	22·5	2240	713	202	450	479	334	62	..	33	3	8	56	4	3	84	113	304	339	123	388	50	1036
IV.	General Service Class	147978	33·8	3748	1541	379	624	637	484	83	..	54	13	6	108	14	5	103	214	517	477	293	652	126	1683
V.	Inmates of Workhouses	5191		1430	202	43	225	370	517	73	..	1	..	1	12	..	1	5	25	45	246	93	316	7	723
I.	PROFESSIONAL AND INDEPENDENT CLASS.																								
	1. Clerical, Medical, Legal, and other Professions; Naval and Military Officers, and Heads of Public Departments	7989	24·2	193	20	8	24	47	72	22	..	1	..	..	1	3	..	4	4	13	16	2	27	1	134
	2. Merchants and Manufacturers, Higher Class	1857	14·5	27	3	1	1	7	10	5	..	..	1	..	..	..	..	..	1	2	..	..	3	1	21
	3. Persons of Rank and Property, not otherwise described	5733	20·4	117	4	..	11	20	51	31	..	..	..	..	..	..	2	..	4	6	3	..	14	2	92
II.	MIDDLE CLASS.																								
	4. General Body of Officials—Civil Service, Banking, &c.	5877	18·0	106	23	11	16	17	34	5	..	1	2	..	1	2	..	8	4	18	12	2	14	..	60
	5. Traders (except Petty Shopkeepers), Business Managers, &c.	26036	17·3	450	119	31	79	95	99	27	..	5	3	1	7	4	..	12	31	63	50	21	75	7	234
	6. Clerks and Commercial Assistants	25001	19·8	495	149	56	125	91	62	12	..	6	1	..	2	5	2	34	35	85	83	27	65	9	226
	7. Miscellaneous—including all Householders in Second Class Localities, not included in above	24555	24·6	603	56	46	102	123	186	90	..	2	2	..	4	2	..	26	16	52	72	7	88	15	369
III.	ARTISAN CLASS AND PETTY SHOPKEEPERS.																								
	8. Working Engineers, Engravers, Printers, Watchmakers and Jewellers	7431	30·5	227	88	23	52	43	19	2	..	3	1	1	8	..	..	10	20	43	36	11	36	7	94
	9. Building and Furnishing Trades	26294	25·9	680	268	70	117	129	80	16	..	11	..	2	31	..	1	17	31	93	97	62	112	21	295
	10. Clothing Trades	23927	15·0	359	73	40	91	82	65	8	..	3	1	1	5	..	..	13	16	39	80	9	65	4	162
	11. Food Supply Trades	7949	19·8	157	54	11	25	39	25	3	..	6	..	..	1	1	2	11	6	27	20	4	30	4	72
	12. Other Trades & Callings ranking with Trades,	26937	23·7	639	187	48	132	140	110	22	..	9	1	4	9	3	..	30	34	90	75	31	117	10	316
	13. Petty Shopkeepers	6839	26·0	178	43	10	33	46	35	11	..	1	..	..	2	..	..	3	6	12	31	6	28	4	97
IV.	GENERAL SERVICE CLASS.																								
	14. Army, Police, Postal Delivery, and Prison Services, &c.	13729	21.4	294	90	29	52	53	58	12	..	2	1	..	4	1	..	13	18	39	37	8	53	8	149
	15. Domestic Servants	39967	11·4	457	97	49	109	96	83	23	..	5	4	2	4	1	..	18	20	54	78	17	66	14	228
	16. Coach and Car Drivers, Vanmen, &c.	10810	29·0	314	142	22	49	64	36	1	..	4	2	..	11	..	1	5	19	42	41	24	64	6	137
	17. Hawkers, Porters. Labourers, &c.	83472	32·1	2683	1212	279	414	424	307	47	..	43	6	4	89	12	4	67	157	382	321	244	469	98	1169
V.	INMATES OF WORKHOUSES.																								
	18. Workhouse Inmates	5191	..	1430	202	43	225	370	517	73	..	1	..	1	12	..	1	5	25	45	246	93	316		723

Table showing, for the Year 1893 (52 weeks), the Number of Deaths of Residents of the several Registrars' Districts in the Dublin Registration District, the Rate per 1,000 of the Population of the respective Districts represented thereby and by the Deaths from the principal Zymotic Diseases ; with the Mortality from each of the principal causes, the Deaths in Public Institutions being assigned to the Districts from which the deceased were admitted. (From Registrar-General's Return.)*

REGISTRARS' DISTRICTS	POPULATION 1891	YEAR 1893 (52 WEEKS)															
		ANNUAL RATE OF MORTALITY PER 1,000 LIVING REPRESENTED BY DEATHS		TOTAL DEATHS	NUMBER OF DEATHS FROM												
					PRINCIPAL ZYMOTIC DISEASES												
		FROM ALL CAUSES	FROM THE PRINCIPAL ZYMOTIC DISEASES *		Small-pox	Measles	Scarlet Fever	Typhus	Whooping Cough	Diphtheria	Simple and Ill-defined Fever	Enteric Fever	Diarrhœa—Dysentery	Phthisis	Convulsions	Diseases of the Respiratory System	Violence (Accidental, Homicidal and Suicidal)
North City, No. 1, E. ..	18260	25·4	3·5	463	..	3	1	1	19	..	..	24	16	55	..	83	18
,, ,, W. ..	43723	29·1	3·6	1273	..	6	1	2	23	3	1	45	78	175	..	231	30
,, 2 ..	28871	32·0	3·7	924	..	6	1	1	21	..	1	40	37	117	..	166	20
,, 3 ..	26055	28·7	2·5	748	..	..	2	..	10	1	2	21	28	107	..	150	13
South City, No. 1 ..	33896	31·7	3·5	1073	..	16	4	4	19	2	..	15	59	149	..	186	20
,, 2 ..	18547	30·8	3·3	571	..	8	1	1	6	..	2	19	24	92	..	121	8
,, 3 ..	39856	29·0	3·7	1156	..	26	6	1	22	3	2	25	62	145	..	218	24
,, 4 ..	35793	26·0	3·3	931	..	16	2	1	24	3	..	29	43	128	..	175	24
Clontarf and Howth, No. 1 ..	4138	15·9	2·4	66	..	3	..	..	..	..	1	..	6	9	..	6	1
Coolock and Drumcondra, No. 1	10730	18·6	1·5	200	..	2	..	..	3	2	..	4	5	29	..	35	1
Finglas and Glasnevin, part of	4240	12·0	2·4	51	..	..	..	1	1	..	1	3	4	11	..	7	2
Palmerstown, part of ..	7273	20·3	4·0	148	..	..	..	..	3	..	..	4	22	29	..	15	4
Rathmines	27410	19·3	2·4	528	..	7	2	1	10	1	1	17	26	73	..	77	15
Donnybrook	25015	17·9	2·0	448	..	9	2	..	7	10	1	7	14	60	..	65	12
Blackrock, No. 1	7163	19·7	2·2	141	..	..	..	1	4	1	..	7	3	14	..	22	3
Kingstown, Nos. 1 and 2 ..	18624	19·9	2·1	370	..	..	1	1	17	6	1	..	13	37	..	48	16
Total City North ..	116909	29·2	3·4	3408	..	15	5	4	73	4	4	130	159	454	..	630	81
Total City South ..	128092	29·1	3·5	3731	..	66	13	7	71	8	4	88	188	514	..	700	76
Total City N. and S. ..	245001	29·1	3·4	7139	..	81	18	11	144	12	8	218	347	968	..	1330	157
Total Suburbs	104593	18·7	2·2	1952	..	21	5	4	45	20	5	42	93	262	..	275	54
Total Registration District ..	349594	26·0	3·1	9091	..	102	23	15	189	32	13	260	440	1230	..	1605	211
Deaths in Institutions of Persons admitted from without the Registration District (not included in above)				318	..	1	2	1	2	2	..	16	7	68	..	37	7

undermentioned Fifteen Urban Sanitary Districts (exclusive of Deaths in Public Institutions of Persons admitted from other localities), with the Number of Deaths from some of the principal causes. (Registrar-General's Return.)

TOWNS AND DISTRICTS	Census Statistics of Districts		REGISTRATION—YEAR 1893 (52 WEEKS)																				
			Rate per 1,000 persons represented by			NUMBER REGISTERED																	
				DEATHS from			DEATHS																
										Number caused by													
	Population	Persons to an Acre	BIRTHS	All Causes	Principal Zymotic Diseases	BIRTHS	TOTAL NUMBER	Under 1 year of Age	At 60 years and upwards	Small Pox	Measles	Scarlet Fever	Typhus	Whooping-cough	Diphtheria	Simple continued and Ill-defined Fever	Enteric Fever	Diarrhœa—Dysentery	Phthisis	Diseases of Respiratory System	Violence	Inquest Cases	No. in Public Institutions
Total of 16 Town Districts	896336	17·1	30·4	24·9	3·2	27227	22307	4339	5063	..	474	102	68	443	120	33	423	1246	3107	4532	394	627	5387
Dublin Registration District†	349594	14·2	28·6	26·0	3.1	10009	9091	1794	2190	..	102	23	15	189	32	13	260	440	1230	1605	211	277	2810
URBAN SANITARY DISTRICTS																							
Belfast*	265123	44·3	35·5	25·8	4·7	9399	6848	1503	1068	..	216	48	14	193	52	10	122	599	1016	1564	106	169	988
Cork	75345	33·3	27·8	24·5	1·3	2092	1844	268	517	..	6	2	7	14	3	1	14	51	314	395	15	58	596
Limerick	37155	17·9	25·9	21·2	2·2	961	789	134	175	..	41	..	8	..	1	3	4	25	111	228	11	14	267
Londonderry ..	33200	15·3	31·0	19·8	2·2	1029	659	149	146	..	23	..	..	5	17	..	3	25	93	166	7	19	63
Waterford	20852	39·1	31·1	28·7	5·1	649	598	102	146	..	35	6	7	22	5	..	10	21	57	75	4	20	204
Galway	13800	2·6	28·2	21·1	1·1	389	291	53	130	..	..	..	8	..	..	..	1	6	30	48	9	10	84
Newry	12961	18·5	27·6	19·4	1·5	358	252	45	65	..	2	..	..	1	1	..	1	15	27	68	3	4	26
Dundalk	12449	9·0	25·9	20·9	3·8	323	260	40	65	..	19	2	1	10	3	..	2	10	28	49	11	11	30
Lisburn	12250	10·8	26·9	18·6	2·7	329	228	39	49	..	..	4	..	1	2	..	3	23	37	39	..	6	25
Drogheda .. .	11873	26·2	25·6	24·5	1·0	304	291	52	100	..	1	..	2	7	..	1	..	2	20	55	2	6	40
Wexford	11545	24·0	26·6	27·5	2·1	307	318	45	116	..	16	3	..	..	..	..	..	5	40	83	6	8	60
Lurgan	11429	13·4	32·0	17·9	1·5	366	205	29	56	..	1	3	3	..	3	..	2	5	38	45	4	8	40
Kilkenny . ..	11048	12·0	25·3	26·2	2·6	280	289	52	104	..	10	9	1	..	..	3	..	6	15	71	..	6	91
Sligo	10274	3·4	23·2	17·6	0·8	238	181	16	78	..	..	..	2	..	..	2	..	4	29	16	2	6	40
Armagh	7438	21·7	26·1	21·9	2·2	194	163	18	58	..	2	2	..	1	1	..	1	9	22	25	3	5	23

* The Population given for Belfast is the estimated population in the middle of the year 1893; that for each of the other districts is the population according to the Census of 1891.

† Exclusive of 318 deaths of persons admitted into Institutions from localities outside the District.

Recorded and **Corrected Death-rates** per 1,000 Persons living in 33 Great Towns in England and Wales, 1893.

TOWNS, in the order of their Corrected Death-rates	Standard Death-rate *	Factor for Correction for Sex and Age Distribution †	Recorded Death-rate, 1893	Corrected Death-rate, 1893 ‡	Comparat Mortalit Figure, 1893 §
Cols.	1	2	3	4	5
England and Wales ...	19·15	1·0000	19·17	19·17	1000
England and Wales, less the 33 Towns ...	19·45	0·9845	17·90	17·62	919
33 Towns ...	17·71	1·0813	21·57	23·32	1216
Croydon ...	18·37	1·0424	16·30	16·99	886
Norwich ...	19·99	0·9579	19·28	18·47	963
Brighton ...	18·94	1·0110	18·42	18·62	971
Portsmouth ...	18·73	1·0224	18·22	18·63	972
Halifax ...	17·20	1·1133	17·36	19·33	1008
Bristol ..	18·33	1·0447	18·93	19·78	1032
Nottingham ...	17·81	1·0752	18·46	19·85	1035
Huddersfield ...	16·47	1·1627	17·20	20·00	1043
Derby ..	17·36	1·1031	18·24	20·12	1050
West Ham ...	17·75	1·0788	18·91	20·40	1064
Plymouth ...	19·70	0·9720	21·25	20·66	1078
Gateshead ...	17·83	1·0740	19·30	20·73	1081
Swansea ...	17·53	1·0924	19·62	21·43	1118
Leicester ...	17·64	1·0855	20·01	21·72	1133
Cardiff ...	17·16	1·1159	19·68	21·96	1146
Birkenhead ...	17·42	1·0993	20·54	22·58	1178
London ...	17·97	1·0656	21·31	22·71	1185
Newcastle-on-Tyne ..	17·58	1·0892	21·00	22·87	1193
Hull ...	18·23	1·0504	21·84	22·94	1197
Sunderland ...	18·25	1·0493	22·53	23·64	1233
Bradford ..	16·73	1·1446	20·96	23·99	1251
Oldham ..	16·72	1·1453	21·01	24·06	1255
Birmingham ...	17·33	1·1050	21·98	24·29	1267
Wolverhampton ...	18·30	1·0464	23·27	24·35	1270
Leeds ...	17·28	1·1082	22·29	24·70	1288
Sheffield ...	17·22	1·1120	22·31	24·81	1294
Burnley ...	16·67	1·1487	21·88	25·13	1311
Blackburn .	17·05	1·1231	23·28	26·15	1364
Salford ...	17·03	1·1244	24·08	27·08	1413
Bolton ...	16·90	1·1331	24·12	27·33	1426
Manchester ...	16·90	1·1331	24·90	28·21	1472
Preston ...	17·42	1·0993	26·37	28·99	1512
Liverpool ...	17·26	1·1094	27·34	30·33	1582

The Tables referring to England are taken from the English Registrar-General's Returns.

* The Standard Death-rate signifies the death-rate at all ages calculated on the hypothesis that the rates at each of twelve age-periods in each town were the same as in England and Wales during the ten years, 1881-90, the Death-rate at all ages in England and Wales during that period having been 19·15 per 1,000.

† The Factor for Correction is the figure by which the Recorded Death-rate should be multiplied in order to correct for variations of sex and age distribution.

‡ The Corrected Death-rate is the Recorded Death-rate multiplied by the Factor for Correction.

§ The Comparative Mortality Figure represents the Corrected Death-rate in each town compared with the Recorded Death-rate at all ages in England and Wales in 1893, taken as 1,000.

CITIES AND BOROUGHS	Population, Estin ted to the middl of 1893 *	Persons to an Acre	Births	Deaths	Deaths of		Deaths from									Inquest Cases	Deaths in Public Institutions	Uncertified causes of Death	Mean Temperature	Rainfall (Inches)
					Infants under 1 year of age	Persons aged 60 years and upwards	Principal Zymotic Diseases	Small-pox	Measles	Scarlet Fever	Diphtheria	Whooping Cough	Fever	Diarrhœa	Violence					
Cols.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
33 Towns ..	10,327,846	34·4	328352	222178	59570	49281	32797	732	4559	3015	4423	4977	2493	12598	7539	14846	42562	3951	49°·4	21·89
London†	4,306,411	57·7	132975	91536	21845	21815	13223	206	1661	1596	3265	2330	719	3446	3425	7432	24598	794	51·1	20·13
West Ham	227,405	48·3	8083	4288	1373	777	768	55	36	80	95	154	68	280	119	160	376	192	—	—
Croydon	108,997	12·1	2852	1772	441	525	240	1	20	11	85	27	12	84	54	133	246	—	—	—
Brighton	117,833	46·6	2981	2165	503	644	217	—	13	12	33	56	15	88	62	96	380	58	50·9	22·69
Portsmouth ..	167,277	38·7	4709	3039	772	785	469	—	113	33	29	37	52	205	88	189	407	23	50·6	23·61
Plymouth	86,781	56·4	2590	1839	439	530	240	—	85	22	14	46	10	63	52	129	175	9	—	—
Bristol	225,028	50·4	6814	4249	963	1289	371	17	25	35	49	77	25	143	142	294	855	70	—	—
Cardiff	142,435	23·5	5121	2796	918	431	469	—	100	39	98	40	27	165	114	231	332	28	—	—
Swansea	93,816	18·4	3285	1836	557	371	172	—	17	33	5	30	19	68	55	98	131	36	—	—
Wolverhampton ..	84,298	23·9	2902	1956	605	463	239	1	21	26	5	4	28	154	69	138	366	20	47·7	19·49
Birmingham ..	487,891	38·4	15916	10693	3152	2342	1481	71	50	68	63	320	98	811	314	287	1912	529	—	—
Norwich	104,184	13·8	3210	2003	626	599	317	—	61	20	23	66	37	110	42	137	178	22	48·6	19 61
Leicester	184,547	21·5	6006	3683	1319	775	727	15	52	80	20	113	46	401	96	210	450	137	—	—
Nottingham ..	220,551	20·1	6642	4061	1128	1090	577	4	25	81	15	59	69	324	164	240	604	68	49·2	20·18
Derby . ..	97,341	28·2	3123	1771	486	424	201	7	17	14	7	44	22	90	57	146	243	15	—	—
Birkenhead ..	103,817	29 8	3431	2127	674	465	292	1	15	12	16	69	27	152	68	168	253	24	—	—
Liverpool ..	510,514	97·9	18322	13919	3863	2267	1987	9	273	231	63	279	269	863	751	959	2720	515	50·1	24·30
Bolton	117,278	49·8	3874	2821	770	576	544	7	166	34	12	77	36	212	64	171	212	23	—	—
Manchester ..	515,598	39·9	17268	12801	3498	2393	1911	48	296	138	165	241	129	894	434	921	2451	170	—	—
Salford	203,431	39·3	7047	4886	1483	890	839	22	92	41	58	99	100	427	145	259	692	161	—	—
Oldham	136,469	28·9	3896	2860	727	555	338	65	29	16	18	55	26	129	75	175	288	31	—	—
Burnley	93,462	23·8	3161	2039	705	323	354	6	27	51	14	34	28	104	50	74	120	29	—	—
Blackburn	124,005	17·8	3822	2879	923	573	504	7	144	5	2	33	30	283	65	105	275	99	—	—
Preston	110,225	27·0	3855	2899	1037	510	661	—	179	27	14	47	51	343	54	76	202	111	—	—
Huddersfield ..	97,549	8·2	2313	1673	326	450	121	—	23	25	3	13	12	45	35	52	136	49	—	—
Halifax	91,918	10·8	2253	1591	390	450	157	35	5	3	23	32	13	46	38	58	183	68	47·5	25·09
Bradford .. .	221,611	20·5	6132	4632	1208	1052	757	115	69	70	23	110	49	321	99	223	539	68	49 2	22·67
Leeds	382,093	17·7	12349	8493	2540	1684	1322	20	341	31	62	166	110	592	218	565	855	82	49·5	22·94
Sheffield	333,922	17·0	11591	7428	2217	1500	1172	5	176	90	61	128	90	622	176	279	836	261	—	—
Hull	208,709	25·4	7125	4545	1470	980	862	8	128	33	22	80	99	492	127	201	555	152	48·7	20·12
Sunderland ..	134,515	46·9	4771	3022	896	616	451	5	17	26	11	24	131	237	90	218	342	28	—	—
Gateshead	90,938	29·0	3309	1750	563	329	314	2	71	9	19	53	21	139	51	116	107	43	—	—
Newcastle	196,997	36·7	6624	4126	1153	808	500	—	212	23	31	34	25	175	146	306	543	36	—	—

* By "estimated" population is meant the number of persons who would be living if the mean rate of increase between 1881 and 1892 had been maintained since the latter date. † For the purposes of these Tables, London includes the Strand Union Workhouse at Edmonton, the Holborn Union Workhouse at Mitcham, the City of London Aslyum at Stone, and the Metropolitan Hospitals and Asylums situated outside Registration London. Several of the provincial towns have been similarly corrected by the addition of deaths occurring in Public Institutions situated beyond their limits.

Table 2.—33 *Towns.—Birth and Death-rates, and Analysis of Mortality, in the* 52 *Weeks of* 1893.

In this Table, 0·00 indicates that the deaths were too few to give a rate of 0·005; when *no death* occurred — is inserted.

CITIES AND BOROUGHS	ANNUAL RATES PER 1,000 PERSONS LIVING.														DEATHS under 1 Year to 1,000 Births	ANNUAL RATE of MORTALITY per 1,000 living		PERCENTAGE to Total Det hs		
	BIRTHS 52 W'ks ending 30thDec 1893	Total Deaths.				Deaths from										Aged 1 to 60 Years	Aged 60 Years and upwards	Inquest Cases	Deaths in Public Institutions	Uncertified Causes of Death
		52 or 53 Weeks ending				Principal Zymotic Diseases	Small-pox	Measles	Scarlet Fever	Diphtheria	Whooping-cough	Fever	Diarrhœa	Violence						
		3rd Jan., 1891	2nd Jan., 1892	31st Dec. 1892	30th Dec. 1893															
Cols.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
33 TOWNS ..	31·9	22·4	22·2	20·7	21·6	3·18	0·07	0·44	0·29	0·43	0·48	0·24	1·25	0·73	181	12·0	79·6	6.7	19·2	1·8
LONDON* ..	31·0	21·5	21·4	20·6	21·3	3·08	0·05	0·39	0·37	0·76	0·54	0·17	0·80	0·80	164	12·3	79·3	8.1	26·9	0·9
WEST HAM ...	35·6	19·5	17·8	18·6	18·9	3·39	0·24	0·16	0·35	0·42	0·68	0·30	1·24	0·52	170	10·2	76·6	3·7	8·8	4·5
CROYDON ...	26·2	16·3	14·5	15·8	16·3	2·21	0·01	0·18	0·10	0·78	0·25	0·11	0·78	0·50	155	8·2	67·1	7.5	13·9	—
BRIGHTON ...	25·4	19·1	18·2	19·2	18·4	1·85	—	0·11	0·10	0·28	0·48	0·13	0·75	0·53	169	9·7	63·4	4·4	17·6	2·7
PORTSMOUTH ...	28·2	17·9	19·0	18·5	18·2	2·81	—	0·68	0·20	0·17	0·22	0·31	1·23	0·58	164	9·9	64·5	6·2	13·4	0·8
PLYMOUTH ...	29·9	21·1	22·5	18·8	21·2	2·77	—	0·98	0·25	0·16	0·53	0·12	0·73	0·60	169	11·4	66·6	7·0	9·5	0·5
BRISTOL ...	30·4	20·2	20·9	19·5	18·9	1·65	0·08	0·11	0·16	0·22	0·34	0·11	0·63	0·63	141	9·9	79·7	6·9	20·1	1·6
CARDIFF ...	36·1	19·5	22·1	18·8	19·7	3·30	—	0·70	0·27	0·68	0·28	0·19	1·18	0·80	179	11·0	67·6	8·3	11·9	1·0
SWANSEA ...	35·1	22·3	22·0	20·4	19·6	1·84	—	0·18	0·35	0·05	0·32	0·20	0·74	0·59	170	10·6	74·7	5·3	7·1	2·0
W'VR'HAMPTON.	34·5	22·2	24·2	21·5	23·3	2·84	0·01	0·25	0·31	0·06	0·05	0·33	1·83	0·82	208	11·7	81·2	7·1	18·7	1·0
BIRMINGHAM ...	32·7	22·4	22·2	20·4	22·0	3·04	0·15	0·10	0·14	0·13	0·66	0·20	1·66	0·65	198	11·6	86·2	2·7	17·9	4·9
NORWICH ...	30·9	20·1	19·3	20·0	19·3	3·05	—	0·59	0·19	0·22	0·64	0·36	1·05	0·40	195	8·5	63·9	6·8	8·9	1·1
LEICESTER ...	32·6	19·7	21·7	18·2	20·0	3·95	0·08	0·28	0·43	0·11	0·61	0·25	2·19	0·52	220	9·4	72·5	5·7	12·2	3·7
NOTTINGHAM ...	30·2	19·2	19·9	18·7	18·5	2·62	0·02	0·11	0·37	0·07	0·27	0·31	1·47	0·75	170	9·2	75·0	5·9	14·9	1·7
DERBY ...	32·2	20·1	19·1	18·3	18·2	2·07	0·07	0·18	0·14	0·07	0·45	0·23	0·93	0·59	156	9·7	76·9	8·2	13·7	0·8
BIRKENHEAD ...	33·1	21·1	20·9	19·6	20·5	2·82	0·01	0·14	0·12	0·15	0·67	0·26	1·47	0·66	196	10·4	82·3	7·9	11·9	1·1
LIVERPOOL ...	36·0	27·8	27·0	24·7	27·3	3·90	0·02	0·54	0·45	0·12	0·55	0·53	1·69	1·47	211	16·6	83·8	6·9	19 5	3·7
BOLTON ...	33·1	26·1	21·9	22·8	24·1	4·65	0·06	1·42	0·29	0·10	0·66	0·31	1·81	0·55	199	13·7	97·6	6·1	7·5	0·8
MANCHESTER ...	33·6	29·7	26·5	23.8	24·9	3·72	0·09	0·58	0·27	0·32	0·47	0·25	1·74	0·84	203	14 6	92·7	7·2	19·1	1·3
SALFORD ...	34·7	27·6	26·0	24·6	24·1	4·14	0·11	0·45	0·20	0·29	0·49	0·49	2·11	0·71	210	13·4	92·5	5·3	14·2	3·3
OLDHAM ...	28·6	24·0	25·7	22·0	21·0	2·48	0·48	0·21	0·12	0·13	0·40	0·19	0·95	0·55	187	12·6	78·7	6·1	10·1	1·1
BURNLEY ...	33·9	23·0	21·6	20·4	21·9	3·80	0·06	0·29	0·55	0·15	0·36	0·30	2.09	0·54	223	11·7	76·7	3·6	5·9	1·4
BLACKBURN ...	30·9	24·4	25·8	21·7	23·3	4·08	0·06	1·16	0·04	0·02	0·27	0·24	2·29	0·53	241	12·1	89·9	3·6	9·6	3·4
PRESTON ...	35·3	27·0	27·3	24·1	26·4	6·01	—	1·63	0·25	0·13	0·43	0·46	3.11	0·49	269	13·4	81·0	2·6	7·0	3·8
HUDDERSFIELD	23·8	20·0	23·0	18·1	17·2	1·24	—	0·24	0·26	0·03	0·13	0·12	0·46	0·36	141	10·0	75·4	3·1	8·1	2·9
HALIFAX ...	24·6	22·4	22·8	19·5	17·4	1·71	0·38	0·05	0·03	0·25	0·45	0·14	0·51	0·41	173	9·0	73·0	3·6	11·5	4·3
BRADFORD ...	27·7	22·8	22·2	18·0	21·0	3·43	0·52	0.31	0·32	0·10	0·50	0·22	1·46	0·45	197	11·7	84·0	4·8	11·6	1·5
LEEDS ...	32·4	22·7	22 9	19 8	22·3	3·47	0·05	0·89	0·08	0·16	0·44	0·29	1·56	0·57	206	12·2	81·7	6·7	10·1	1·0
SHEFFIELD ...	34·8	25·8	23·9	20·8	22·3	3·52	0·02	0·53	0·27	0·18	0·38	0·27	1·87	0·53	191	12·1	87·0	3·8	11·3	3·5
HULL ...	34·2	20·9	21·0	19·6	21·8	4·14	0·04	0·61	0·16	0·11	0·38	0·48	2·36	0·61	206	11·1	77·9	4 4	12·2	3·3
SUNDERLAND ...	35·6	23·9	25·0	20·9	22·5	3·36	0·04	0·13	0·19	0·08	0·18	0·98	1·76	0·67	188	12·3	80·1	7·2	11·3	0·9
GATESHEAD ...	36·5	21·3	23·1	18·9	19·3	3·46	0·02	0·78	0·10	0·21	0·58	0·23	1·54	0·59	170	10·3	71·4	6·6	6·1	2·5
NEWCASTLE ...	33·7	23·1	23·8	19·7	21·0	2·55	—	1·08	0·12	0·16	0·17	0·13	0·89	0·74	174	12·0	79·6	7·4	13·2	0·9

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* *See* note (†) to Table on page 51.

in the Ten Years 1883-92, *and in* 1893.

In this Table 0·00 indicates that the deaths were too few to give a rate of 0·005; when *no death* occurred — is inserted.

CITIES AND BOROUGHS	ALL CAUSES		SMALL-POX		MEASLES		SCARLET FEVER		DIPHTHERIA		WHOOPING-COUGH		FEVER		DIARRHŒA		DEATHS UNDER ONE YEAR TO 1,000 BIRTHS	
	Ten years 1883-92	1893	Ten years 1883-92	1893	Ten years 1883-92	1893	Ten years 1883-92	1893	Ten years 1883-92	1893	Ten years 1883-92	1893	Ten years 1883-92	1893	Ten years 1883-92	1893	Ten years 1883-92	1893
33 TOWNS ..	21·3	21·6	0·06	0·07	0·63	0·44	0·33	0·29	0·21	0·43	0·59	0·48	0·23	0·24	0·86	1·23	163	181
LONDON* ..	20·4	21·3	0·07	0·05	0·63	0·39	0·27	0·37	0.30	0·76	0·65	0·54	0·18	0·17	0·72	0·80	153	164
WEST HAM ..	19·4	18·9	0·45	0·24	0·62	0·16	0·30	0·35	0·25	0·42	0·75	0·68	0·23	0·30	0·79	1·24	152	170
CROYDON ..	15·0	16·3	0·06	0·01	0·40	0·18	0·09	0·10	0·23	0·78	0·44	0·25	0·11	0·11	0·52	0·78	117	155
BRIGHTON ..	18·1	18·4	0·00	—	0·39	0·11	0·11	0·10	0·15	0·28	0·41	0·48	0·14	0·13	0·68	0·75	147	169
PORTSMOUTH ..	18·6	18·2	0·01	—	0·47	0·68	0·10	0·20	0·24	0·17	0·36	0·22	0·43	0·31	0·78	1·23	142	164
PLYMOUTH ..	21·5	21·2	0·00	—	0·46	0·98	0·49	0·25	0·16	0·16	0·48	0·53	0·23	0·12	0·64	0·73	161	169
BRISTOL ..	19·5	18·9	0·03	0·08	0·54	0·11	0·27	0·16	0·10	0·22	0·49	0·34	0·14	0·11	0·49	0·63	144	141
CARDIFF ..	21·0	19·7	0·03	—	0·64	0·70	0·37	0·27	0·20	0·68	0·53	0·23	0·31	0·19	0·88	1·18	165	179
SWANSEA ..	20·6	19·6	0·00	—	0·74	0·18	0·60	0·35	0·05	0·05	0·52	0·32	0·35	0·20	0·41	0·74	153	170
WOLVERHAMPTON ..	21·9	23·3	0·02	0·01	0·51	0·25	0·23	0·31	0·09	0·06	0·45	0·05	0·17	0·33	1·05	1·83	171	208
BIRMINGHAM ..	20·9	22·0	0·05	0·15	0·56	0·10	0·26	0·14	0·12	0·13	0·58	0·66	0·15	0·20	1·11	1·66	169	198
NORWICH ..	19·9	19·3	—	—	0·35	0·59	0·11	0·19	0·18	0·22	0·43	0·64	0·31	0·36	0·95	1·05	168	195
LEICESTER ..	20·3	20·0	0·00	0·08	0·43	0·28	0·29	0·43	0·08	0·11	0·42	0·61	0·20	0·25	1·56	2·19	204	220
NOTTINGHAM ..	20·7	18·5	0·01	0·02	0·48	0·11	0·16	0·37	0·11	0·07	0·53	0·27	0·32	0·31	1·03	1·47	170	170
DERBY ..	18·6	18·2	0·01	0·07	0·42	0·18	0·14	0·14	0·10	0·07	0·43	0·45	0·24	0·23	0·62	0·93	148	156
BIRKENHEAD ..	20·2	20·5	0·02	0·01	0·57	0·14	0·31	0·12	0·10	0·15	0·43	0·67	0·31	0·26	0·66	1·47	154	196
LIVERPOOL ..	26·0	27·3	0·04	0·02	0·95	0·54	0·52	0·45	0·16	0·12	0·69	0·55	0·39	0·53	1·02	1·69	185	211
BOLTON ..	22·7	24·1	0·00	0·06	0·69	1·42	0·28	0·29	0·10	0·10	0·61	0·66	0·26	0·31	1·24	1·81	175	199
MANCHESTER ..	26·5	24·9	0·02	0·09	0·83	0·58	0·47	0·27	0·20	0·32	0·66	0·47	0·28	0·25	1·02	1·74	182	203
SALFORD ..	24·9	24·1	0·00	0·11	0·88	0·45	0·59	0·20	0·33	0·29	0·73	0·49	0·43	0·49	1·41	2·11	187	210
OLDHAM ..	23·9	21·0	0·02	0·48	0·82	0·21	0·34	0·12	0·16	0·13	0·58	0·40	0·19	0·19	0·60	0·95	175	187
BURNLEY ..	21·8	21·9	0·00	0·06	0·73	0·29	0·39	0·55	0·09	0·15	0·35	0·36	0·31	0·30	1·48	2·09	213	223
BLACKBURN ..	24·6	23·3	0·02	0·06	0·83	1·16	0·59	0·04	0·01	0·02	0·54	0·27	0·39	0·24	1·16	2·29	192	241
PRESTON ..	26·7	26·4	0·05	—	0·71	1·63	0·45	0·25	0·17	0·13	0·62	0·43	0·44	0·46	2·17	3·11	223	269
HUDDERSFIELD ..	20·6	17·2	0·00	—	0·61	0·24	0·22	0·26	0·12	0·03	0·45	0·13	0·14	0·12	0·36	0·46	167	141
HALIFAX ..	21·2	17·4	0·02	0·38	0·47	0·05	0·26	0·03	0·10	0·25	0·27	0·35	0·21	0·14	0·28	0·51	161	173
BRADFORD ..	20·3	21·0	0·00	0·52	0·48	0·31	0·30	0·32	0·05	0·10	0·45	0·50	0·18	0·22	0·79	1·46	166	197
LEEDS ..	21·9	22·3	0·01	0·05	0·47	0·89	0·64	0·08	0·08	0·16	0·46	0·44	0·28	0·29	1·09	1·56	173	206
SHEFFIELD ..	22·2	22·3	0·24	0·02	0·52	0·53	0·71	0·27	0·10	0·18	0·57	0·38	0·23	0·27	1·08	1·87	173	191
HULL ..	20·3	21·8	0·03	0·04	0·38	0·61	0·22	0·16	0·08	0·11	0·49	0.38	0·24	0·48	1·02	2·36	162	206
SUNDERLAND ..	22·6	22·5	0·13	0·04	0·80	0·13	0·33	0·19	0·10	0·08	0·45	0·18	0·34	0·98	1·00	1·76	158	188
GATESHEAD ..	21·2	19·3	0·10	0·02	0·51	0·78	0·47	0·10	0·07	0·21	0·57	0·58	0·28	0·23	1·08	1·54	162	170
NEWCASTLE ..	22·4	21·0	0·05	—	0·68	1·08	0·35	0·12	0·17	0·16	0·53	0·17	0·26	0·13	0·69	0·89	163	174

* *See* note (†) to Table on page 51.

Births and **Deaths** in 1893, in **Edinburgh, Glasgow,** and **Dublin**, and in certain **Colonial** and **Foreign Cities.**

CITIES	POPULATION (enumerated or estimated)	BIRTHS	DEATHS	ANNUAL RATE per 1,000 Persons living		DEATHS FROM SOME ZYMOTIC DISEASES						
		Excluding Stillborn		Births	Deaths	Small-pox	Measles	Scarlet Fever	Diphtheria	Whooping-cough	Fever	Diarrhœal Diseases
EDINBURGH ..	267261	7429	5268	27·9	19·8	1	165	56	59	155	38	169
GLASGOW ..	677883	23130	15789	34·2	23·4	25	849	261	209	709	138	613
DUBLIN ..	349594	10009	9409	28·7	27·0	—	103	25	34	191	305	447
CALCUTTA ..	466460	—	12055	—	25·9	15	16	—	14	36	4751	2047†
BOMBAY	821764	15164	23059	18·5	28·1	203	287	?	?	?	5876	1822†
MADRAS ..	452518	18290	18477	40·5	40·9	20	876	?	?	?	6575	2720†
SYDNEY (with Suburbs)	411710	13945	6483	33·9	15·7	—	434	145	130	39	77	305
BRISBANE do.	93657	3454	1523	36·9	16·3	—	84	1	52	28	18	139
PARIS ..	2424705	61101	52739	25·3	21·8	256	681	176	1264*	509	609	3535†
BRUSSELS (with Faubourgs)	488188	12653	9675	25·9	19·8	19	353	11	19‡	101	130	973†
AMSTERDAM ..	437892	14532	8136	33·3	18·6	—	68	18	100	140	69	142†
ROTTERDAM ..	222233	8245	4852	37·2	21·9	112	31	72	22	68	12	45†
THE HAGUE ..	169828	4031	3232	23·8	19·1	3	88	2	33	42	3	11†
COPENHAGEN ..	337500	10301	6845	30·6	20·3	—	13	104	223	131	29	715
STOCKHOLM ..	249246	7060	4770	28·4	19·2	—	—	252	348*	59	21	435
CHRISTIANIA ..	161151	2631	2820	16·4	17·5	1	2	44	76	11	10	309
ST. PETERSBURG (without Faubourgs)	954400	30156	29242	31·6	30·6	92	262	499	252	192	489	5190†
MOSCOW ..	753469	26983	27061	35·8	35·9	119	181	547	788	156	302	5110†
BERLIN ..	1714938	49710	36032	29·0	21·0	2	341	582	1578	608	161	4621†
HAMBURG (State)	634878	23410	12977	36·9	20·4	3	59	136	411*	131	115	982†
DRESDEN ..	308930	9917	7195	32·2	23·4	—	223	43	369*	120	14	710
BRESLAU ..	353551	12284	10256	34·8	29·1	—	177	34	406*	147	37	1249
MUNICH ..	385000	13633	10075	35·4	26 2	—	204	83	258*	22	57	1909
VIENNA (with Suburbs)	1435931	47446	34468	33·0	24·0	36	1194	313	1638*	119	104	3036†
PRAGUE ..	327953	10722	9075	32·8	27·7	141	48	77	209	85	118	235
BUDA-PESTH ..	539516	19598	14432	36·4	26·8	6	144	105	573	60	81	1474†
TRIESTE ..	158314	4975	4420	31·4	27·9	203	25	39	224*	6	27	33
ROME ..	449430	11775	10020	26·2	22·3	6	270	17	123	33	341§	841†
MILAN ..	430829	12800	11113	29·7	25·8	41	42	37	555	30	269	655
TURIN ..	334090	7562	7013	22·6	21·0	3	112	41	125	54	98	600
VENICE ..	163601	4274	3993	26·2	24·5	63	136	7	34*	7	42	373
CAIRO ..	374838	20418	19023	54·6	50·9	26	34	—	114*	132	576	5788
ALEXANDRIA (49 weeks) ..	231396	10422	7890	47·9	36·3	27	17	1	95*	91	183	2008
BOSTON ..	487397	—	11710	—	24·0	4	27	248	476	40	148	635
NEW YORK ..	1860803	—	44370	—	23·9	100	387	552	1962	540	578	3313
BROOKLYN ..	990891	—	20964	—	21·2	11	111	309	604	261	180	1839
PHILADELPHIA .	1115562	—	23615	—	21·2	5	88	268	1159	212	458	1534
BALTIMORE ..	455427	—	9554	—	21·0	—	39	36	185	60	255	643
CINCINNATI ..	325000	—	6092	—	18 7	?	?	?	?	?	?	?
NEW ORLEANS ..	254000	—	7130	—	28·1	—	1	1	123	25	262	515†
SAN FRANCISCO	330000	—	5919	—	17·9	3	1	50	97	15	106	135

* Including deaths from croup. † Including 596 deaths from cholera in Calcutta, 137 in Bombay, 25 in Madras, 1 in Paris, 19 in Brussels, 3 in Amsterdam, 35 in Rotterdam, 7 in The Hague, 1,577 in St. Petersburg, 722 in Moscow, 9 in Berlin, 70 in Hamburg, 3 in Vienna, 131 in Buda-Pesth, 43 in Rome, and 1 in New Orleans. ‡ There were in addition 100 deaths from "croup." § Including **189 deaths from malarial fever.**

DISEASE IN DUBLIN IN 1893.

There are no available statistics to show the number of cases of the various diseases of a non-infectious nature. With respect to infective diseases, an estimate, though not a very accurate one, may be made, based on the notifications made under the provisions of the Infectious Diseases Notification Act.

The Number of Cases of the undermentioned Diseases treated during the Year (52 weeks) ended Saturday, 31*st December*, 1893, *in the principal Dublin Hospitals, in which cases of Infectious Diseases are received.*

Diseases	No. of Cases in Hospital 31st Dec., 1893	No. Admitted during Year 1893	Discharged	Died	No. under Treatment on above date
Measles ...	9	68	305	15	57
Scarlet Fever ...	15	543	453	12	93
Typhus ,, ...	2	54	37	12	7
Enteric ,, ...	161	895	898	82	76
Pneumonia ...	25	381	332	50	24

No case of small-pox was admitted into hospital in 1893, or was heard of in any part of Dublin.

Notification of Infective Diseases.

The number of cases of infective disease notified continues to show a marked annual increase, as will be seen by the following table:—

Cases notified from 28th June to 31st December, 1890	343
Cases notified in 1891	590
Ditto 1892	891
Ditto 1893	3,846

The large increase in 1893 is due nearly altogether to the following causes:—

1. A great increase in the prevalence of typhoid fever as compared with previous years.

2. Whooping-cough and measles were added to the notifiable diseases in May, 1893.

3. In October, choleraic diarrhœa, diarrhœa and dysentery were made notifiable diseases in view of a possible invasion of Asiatic cholera.

The uselessness of having cases of whooping-cough notified having been experimentally demonstrated, this disease has since been removed from the schedule of notifiable diseases.

ALPHABETICAL LIST OF STREETS IN WHICH CASES OF INFECTIOUS DISEASES OCCURRED IN DUBLIN DURING THE YEAR 1893.

	CASES
Abbey-street, Upper, 9 Typhoid Fever, 8 Measles, 5 Undefined Fever, 2 Erysipelas, 2 Scarlatina, 2 Diarrhœa	28
Abbey-street, Lower, 2 Measles	2
Abbey-street, Middle, 1 Scarlatina	1
Abbey-street, Old, 1 Scarlatina, 1 Undefined Fever, 1 Diarrhœa	3
Adelaide Hospital, 3 Typhoid Fever, 4 Erysipelas, 4 Scarlatina	11
Aberdeen-street, 1 Typhoid Fever	1
Abercorn-road, 1 Undefined Fever	1
Aldborough-court, 2 Undefined Fever	2
Albert-court, 1 Measles, 1 Undefined Fever, 1 Scarlatina, 1 Erysipelas, 1 Diarrhœa	5
Aldborough House Barracks, 1 Scarlatina	1
Albert-place, West, 1 Erysipelas, 3 Scarlatina, 1 Measles, 2 Typhoid Fever	7
Albert-place, East, 1 Whooping Cough, 1 Typhoid Fever ...	2
Amiens-street, 1 Scarlatina, 4 Typhoid Fever, 3 Whooping Cough	8
Amiens-terrace, 1 Typhoid Fever	1
Anne-street, South, 1 Erysipelas, 1 Whooping Cough ...	2

	Cases
Anne-street, North, 11 Undefined Fever, 6 Typhoid Fever, 2 Whooping Cough, 6 Measles, 1 Scarlatina, 9 Diarrhœa, 1 Erysipelas	36
Anglesea-street, 2 Typhoid Fever	2
Annesley-avenue, 1 Scarlatina	1
Annesley-place, 1 Scarlatina, 1 Typhoid Fever	2
Anne's-lane, 1 Typhoid Fever, 1 Whooping Cough	2
Archbold-place, 1 Erysipelas	1
Armstrong-street, 2 Typhoid Fever, 2 Undefined Fever	4
Arnott-street, 3 Scarlatina, 1 Erysipelas, 1 Typhoid Fever	5
Arran-street, East, 3 Fevers, 1 Scarlatina, 1 Typhoid, 2 Whooping Cough, 1 Measles	8
Arran-street, West, 2 Diarrhœa, 1 Typhoid Fever	3
Arran-quay, 2 Diarrhœa, 2 Typhoid Fever	4
Arranmore-avenue, 1 Typhoid Fever	1
Arranmore-terrace, 1 Scarlatina	1
Arbour-place, 1 Undefined Fever	1
Ashbrook-terrace, 1 Measles	1
Ashford-street, 1 Scarlatina	1
Aston's-quay, 2 Typhoid Fever, 2 Croup, 1 Scarlatina	5
Aston's-place, 1 Typhoid Fever	1
Asylum Yard, 1 Diarrhœa, 2 Whooping Cough	3
Aungier-street, 1 Puerperal Fever, 1 Undefined Fever, 2 Erysipelas, 2 Measles, 1 Cholera Infantum, 7 Typhoid Fever, 2 Whooping Cough, 2 Diarrhœa	18
Ardee-street, 2 Typhoid Fever, 5 Measles	7
Ardee-row, 1 Typhoid Fever	1
Auburn-street, 3 Typhoid Fever, 1 Small-pox	4
Audoen's Arch, 1 Diarrhœa	1
Avondale-road, 2 Typhoid Fever, 1 Fever	3
Ayre's-court, 1 Whooping Cough, 2 Diarrhœa, 2 Measles	5
Aylward's-court, 3 Measles, 1 Diarrhœa	4
Avondale-avenue, 1 Erysipelas, 1 Scarlatina	2
Aughrim-street, 2 Scarlatina, 1 Erysipelas	3
Baggot-street, Lower, 6 Typhoid Fever, 4 Scarlatina, 1 Erysipelas, 1 Whooping Cough	12
Bachelor's Walk, 1 Whooping Cough	1

	Cases
Bailey's-row, 1 Typhoid Fever	1
Back-lane, 1 Measles, 3 Erysipelas, 1 Whooping Cough, 3 Diarrhœa	8
Ballybough-road, 1 Typhoid Fever	1
Barrow-street, 1 Whooping Cough	1
Basin-lane, 1 Typhoid Fever	1
Barry's-court, 1 Erysipelas	1
Barry's-yard, 1 Erysipelas	3
Bass-place, 1 Measles, 1 Erysipelas, 1 Diarrhœa ...	3
Beaver-street, 1 Whooping Cough, 1 Enteric Fever ...	2
Belvidere-avenue, 1 Whooping Cough, 1 Typhoid ...	2
Belvidere-road, 4 Typhoid Fever	4
Benburb-street, 1 Typhoid Fever, 1 Erysipelas ...	2
Belvidere-place, 4 Scarlatina, 1 Typhoid Fever ...	5
Berkeley-road, 3 Typhoid Fever	3
Beresford-place, 1 Scarlatina, 1 Typhoid Fever ...	2
Beresford-street, 1 Undefined Fever, 2 Typhoid Fever, 2 Typhus Fever	5
Ball's-court, 1 Enteric Fever	1
Bayview-avenue, 1 Typhoid Fever	1
Bessborough-avenue, 1 Enteric Fever	1
Basin View-terrace, 1 Typhoid Fever	1
Bishop-street, 3 Typhoid Fever, 2 Erysipelas, 3 Measles, 4 Whooping Cough, 1 Undefined Fever, 1 Diphtheria, 1 Diarrhœa	15
Blessington-street, 5 Typhoid Fever, 1 Scarlatina ...	6
Blackhall-place, 4 Undefined Fever, 1 Enteric Fever, 2 Typhus Fever, 1 Scarlatina, 3 Typhoid Fever ...	11
Bishop-court, 2 Whooping Cough, 1 Measles	3
Blackhall-street, 1 Typhoid Fever	1
Blackpitts, 1 Diarrhœa, 1 Typhoid Fever	2
Blessington-place, 1 Diarrhœa	1
Bloomfield-avenue, 5 Scarlatina	5
Blyth's-avenue, 1 Typhoid Fever	1
Bow-street, 1 Undefined Fever, 1 Cholera Nostros ...	2
Bolton-street, 5 Typhoid Fever, 6 Undefined Fever, 9 Whooping Cough, 1 Erysipelas, 1 Diphtheria, 3 Scarlatina, 5 Measles, 4 Diarrhœa	35

	Cases
Bolton-court, 1 Erysipelas, 1 Measles, 1 Diarrhœa	3
Bonny's-lane, 2 Typhoid Fever, 2 Diphtheria	4
Brabazon-square, 2 Typhoid Fever	2
Boyne-street, 1 Undefined Fever, 1 Erysipelas. 5 Measles, 5 Diarrhœa, 1 Scarlatina	13
Breffni-terrace, 2 Scarlatina, 2 Undefined Fever	4
Brabazon-street, 1 Cholera Nostros, 1 Typhoid Fever	2
Bread-row, 4 Measles	4
Breen's-court, 1 Whooping Cough	1
Brennan's Cottages, 1 Scarlatina	1
Bridge-street, Lower, 3 Whooping Cough, 3 Diarrhœa, 2 Measles	8
Bridge-street, Upper, 1 Erysipelas, 4 Diarrhœa, 3 Measles	8
Bride-street, 3 Typhoid Fever, 7 Erysipelas, 1 Undefined Fever, 5 Measles 7 Whooping Cough, 6 Diarrhœa	29
Bride-street, New, 3 Measles, 1 Typhoid Fever	4
Bridgefoot-street, 3 Erysipelas. 1 Croup, 2 Whooping Cough	6
Britain-street, Great, 4 Measles, 3 Diarrhœa, 16 Typhoid Fever, 8 Fever, 6 Erysipelas, 4 Whooping Cough, 2 Scarlatina	43
Britain-court, 4 Whooping Cough, 1 Measles	5
Britain-street, Little, 1 Erysipelas, 1 Diarrhœa, 1 Undefined Fever	3
Braithwaite-st., 1 Measles, 1 Whooping Cough, 1 Diarrhœa	3
Bride's-alley, 3 Measles, 2 Erysipelas, 5 Diarrhœa	10
Brown-street, 2 Measles	2
Brunswick-street, Great, 4 Typhoid Fever, 1 Erysipelas, 1 Scarlatina, 4 Whooping Cough	10
Brunswick-villa, 1 Whooping Cough	1
Buckingham-street, Lower, 4 Erysipelas, 2 Typhoid Fever, 2 Fever, 1 Scarlatina	9
Buckingham-street, Upper, 6 Scarlatina, 3 Undefined Fever, 2 Whooping Cough, 4 Typhoid Fever, 2 Diarrhœa	17
Buckingham-place, 1 Typhoid Fever	1
Buckingham-buildings, 2 Diarrhœa, 1 Erysipelas, 1 Typhoid	4
Buckingham-cottages, 2 Typhoid Fever	2

	Cases.
Burgh-quay, 1 Undefined Fever	1
Burke's-court, 1 Whooping Cough, 1 Typhoid	2
Byrne's-square, 1 Whooping Cough	1
Byrne's-court, 1 Undefined Fever	1
Cameron-street, 1 Puerperal Fever	1
Camac-place, 3 Whooping Cough	3
Camden-street, Old, 3 Measles	3
Camden-row, 5 Measles, 1 Typhoid Fever	6
Camden-court, 1 Whooping Cough, 1 Diarrhœa	2
Camden-street, Lower, 5 Scarlatina, 2 Typhoid Fever, 4 Measles, 1 Undefined Fever, 1 Diarrhœa	13
Canal-street, Grand, 1 Measles, 4 Whooping Cough, 2 Typhoid Fever, 1 Erysipelas, 1 Diarrhœa	9
Chancery-lane, 1 Typhoid Fever, 1 Scarlatina, 1 Diarrhœa 1 Measles, 1 Whooping Cough	5
Canning-place, 4 Typhoid Fever, 4 Typhus Fever, 2 Scarlatina	10
Capel-street, 6 Erysipelas, 2 Scarlatina, 16 Typhoid Fever, 1 Undefined Fever, 9 Measles, 1 Croup, 3 Diarrhœa	38
Carlisle-street, 2 Scarlatina, 1 Erysipelas	3
Cardiff-lane, 1 Erysipelas	1
Carlingford-parade, 1 Diarrhœa	1
Carman's-hall, 1 Typhoid Fever, 1 Diphtheria, 1 Scarlatina, 2 Measles	5
Castle-street, 3 Typhoid Fever, 1 Whooping Cough, 1 Cholera Nostros, 2 Diarrhœa, 1 Erysipelas	8
Castle-market, 1 Scarlatina	1
Castle-yard, Upper, 1 Measles	1
Cathedral-lane, 1 Erysipelas	1
Catherine-street, 1 Enteric Fever	1
Charlemont-avenue, 1 Erysipelas	1
Charlemont-place, 2 Measles	2
Charlemont-mall, 5 Measles, 1 Typhoid Fever, 2 Scarlatina	8
Charlemont-row, 1 Typhoid Fever, 1 Undefined Fever, 1 Diarrhœa	3
Charleville-road, 1 Scarlatina	1

	Cases.
Charleville-avenue, 2 Typhoid Fever, 1 Measles	3
Charlemont-street, 15 Typhoid Fever, 8 Measles, 4 Scarlatina, 2 Erysipelas, 3 Diarrhœa	32
Charles-street, 4 Measles, 8 Undefined Fever, 2 Scarlatina, 7 Enteric Fever, 2 Whooping Cough, 2 Diarrhœa	25
Charles-street, Great, 2 Typhoid Fever	2
Chancery-place, 1 Erysipelas, 1 Whooping Cough, 1 Diarrhœa	3
Chalgrove-terrace, 4 Scarlatina	4
Chapel-lane, 1 Erysipelas, 1 Undefined Fever	2
Chapter-place, 2 Erysipelas	2
Chamber-street, 1 Scarlatina, 1 Diarrhœa	2
Cole's-lane, 4 Whooping Cough, 2 Erysipelas, 1 Diarrhœa, 1 Undefined Fever	8
College-green, 1 Scarlatina	1
Coleraine-street, 10 Undefined Fever, 2 Measles, 4 Whooping Cough, 1 Typhoid Fever, 2 Diarrhœa	19
Conyngham-road, 1 Whooping Cough	1
Cottage-place, 2 Measles, 1 Diarrhœa, 1 Undefined Fever	4
Corn Exchange-place, 1 Measles	1
Cork-street, 2 Typhoid Fever, 4 Whooping Cough, 1 Diphtheria, 1 Cholera-Nostros, 4 Undefined Fever, 2 Erysipelas, 2 Scarlatina, 1 Diarrhœa	17
Cork-street Hospital, 1 Measles	1
Cork-hill, 1 Enteric Fever	1
Clonliffe Cottages, 1 Erysipelas	1
Cornmarket, 2 Typhoid Fever, 2 Measles, 1 Diarrhœa, 1 Whooping Cough	6
Crampton Buildings, 1 Scarlatina, 1 Typhoid Fever	2
Crown-alley, 1 Diarrhœa	1
Courtney-place, 2 Typhoid Fever	2
Creighton-street, 1 Typhoid Fever, 1 Scarlatina	2
Cumberland-street, North, 5 Typhoid Fever, 9 Whooping Cough, 3 Undefined Fever, 2 Diarrhœa	19
Cumberland-street, South, 4 Erysipelas, 1 Diarrhœa, 1 Measles, 5 Typhoid Fever, 1 Scarlatina, 3 Whooping Cough, 5 Undefined Fever	20

	Cases.
Crampton-court, 1 Typhoid Fever, 2 Measles	3
Curzon-street, 2 Measles, 3 Typhoid Fever	5
Cooke-street, 3 Typhoid Fever, 5 Measles, 1 Cholera-Nostros, 5 Erysipelas, 4 Whooping Cough, 6 Diarrhœa	24
Cuffe-street, 6 Scarlatina, 4 Whooping Cough, 1 Undefined Fever, 5 Erysipelas, 6 Measles, 3 Typhoid Fever, 5 Diarrhœa	30
Chatham-street, 4 Typhoid Fever, 1 Whooping Cough, 2 Measles	7
Charlotte-street, 9 Measles, 1 Whooping Cough, 2 Erysipelas	12
Cherry-lane, 2 Undefined Fever	2
Christchurch-place, 1 Erysipelas, 3 Typhoid Fever, 1 Undefined Fever	5
Church-avenue, 1 Whooping Cough	1
Church-street, 9 Typhoid Fever, 1 Erysipelas, 2 Diarrhœa, 5 Fever, 1 Whooping Cough, 1 Cholera Nostros	19
Church-lane, 2 Whooping Cough	2
Church-road, 1 Erysipelas, 4 Typhoid Fever	5
Church-street, East, 1 Typhoid Fever, 2 Measles, 1 Erysipelas, 2 Fever	6
Chesnut-place, 1 Diarrhœa	1
Circular-road, South, 4 Typhoid Fever, 2 Scarlatina, 1 Erysipelas	7
Circular-road, North, 1 Typhoid Fever	1
City-quay, 2 Erysipelas, 1 Undefined Fever, 1 Measles	4
Clanbrassil-street, Lower, 4 Typhoid Fever, 2 Scarlatina, 3 Measles, 1 Whooping Cough, 2 Diarrhœa, 6 Erysipelas	18
Clanbrassil-street, Upper, 1 Diphtheria, 1 Typhus Fever, 1 Erysipelas, 1 Diarrhœa, 1 Whooping Cough, 1 Scarlatina, 1 Undefined Fever, 2 Typhoid Fever	9
Clare-street, 1 Erysipelas	1
Clarence-street, North, 1 Undefined Fever, 1 Typhoid Fever	2
Clarence-street, South, 1 Typhoid Fever, 4 Measles, 4 Whooping Cough, 5 Diarrhœa, 3 Scarlatina, 1 Erysipelas	18

	Cases
Clarence-place, 2 Erysipelas, 3 Undefined Fever, 11 Whooping Cough, 5 Typhoid Fever	21
Clarendon-street, 4 Undefined Fever, 3 Measles, 1 Diphtheria, 7 Scarlatina, 2 Erysipelas, 2 Whooping Cough, 3 Typhoid Fever	22
Clanwilliam-place, 1 Scarlatina	1
Clarendon-row, 1 Erysipelas, 1 Fever	2
Clonliffe-avenue, 1 Whooping Cough	1
Clonliffe-road, 1 Erysipelas, 3 Scarlatina	4
Clarke's-court, 1 Scarlatina	1
Cody's-cottages, 1 Erysipelas, 2 Typhoid Fever	3
Commons-street, 1 Whooping Cough, 3 Typhoid Fever, 1 Fever	5
Coburgh-place, 1 Whooping Cough	1
Coombe, 3 Erysipelas, 7 Typhoid Fever, 15 Measles, 1 Diarrhœa	26
Coombe-cottages, 1 Undefined Fever, 1 Typhoid Fever	2
Coombe-street, 2 Typhoid Fever, 1 Measles	3
Daniel-street, 1 Measles	1
Dalymount-terrace, 1 Typhoid Fever	1
Dame-court, 1 Measles, 1 Typhoid Fever	2
Dame-street, 4 Typhoid Fever, 3 Measles, 1 Erysipelas	8
Daniel-street, 1 Measles	1
Dawson-row, 1 Typhoid Fever, 1 Diarrhœa, 1 Measles, 1 Undefined Fever	4
Dawson-street, 1 Measles, 3 Scarlatina	4
Davis-place, 1 Typhoid Fever	1
Davitt's-parade, 3 Whooping Cough	3
Dean-street, 2 Whooping Cough	2
Denmark-street, 5 Typhoid Fever, 3 Undefined Fever, 1 Diarrhœa, 1 Whooping Cough, 1 Scarlatina, 3 Measles	14
Denmark-street, Little, 1 Typhoid Fever	1
Dean Swift-square, 1 Measles	1
Denmark-place, 1 Diarrhœa, 1 Undefined Fever	2
Denzille-place, 1 Typhoid Fever, 1 Whooping Cough, 1 Diarrhœa	3
Denzille-lane, 5 Whooping Cough, 2 Typhoid Fever, 1 Erysipelas, 1 Diarrhœa	9

	Cases
Denzille-street, 3 Typhoid Fever, 1 Undefined Fever, 3 Measles, 8 Erysipelas, 4 Whooping Cough, 3 Diarrhœa, 1 Scarlatina	23
Desmond-street, 1 Scarlatina, 2 Measles, 1 Erysipelas	4
Digges-street, 1 Scarlatina, 4 Whooping Cough, 1 Diarrhœa	6
Dillon-place, 1 Whooping Cough	1
Dixon's-row, 1 Croup	1
Despensary-lane, 1 Measles, 1 Erysipelas, 1 Diarrhœa	3
Dominick-street, Lower, 13 Typhoid Fever, 3 Undefined Fever, 3 Diarrhœa, 4 Erysipelas, 1 Diphtheria, 3 Measles	27
Dominick-street, Upper, 11 Typhoid Fever, 11 Undefined Fever, 2 Erysipelas, 1 Measles	25
Dominick-court, 1 Typhoid Fever	1
Dominick-place, 1 Typhoid Fever, 1 Scarlatina, 1 Erysipelas	3
Donore-terrace, 1 Scarlatina	1
Dolphin's-barn-lane, 1 Measles, 2 Typhoid Fever	3
Dolphin's-barn-avenue, 2 Scarlatina, 1 Whooping Cough, 6 Typhoid Fever	9
Dorset-street, Lower, 1 Undefined Fever, 1 Scarlatina, 4 Typhoid Fever, 3 Measles, 2 Diarrhœa, 1 Erysipelas	12
Dorset-street, Upper, 12 Typhoid Fever, 3 Erysipelas, 4 Whooping Cough, 2 Undefined Fever, 2 Scarlatina, 1 Diphtheria, 6 Measles, 1 Diarrhœa	31
Dorset row, 1 Croup, 1 Measles, 1 Typhoid Fever	3
Dowling's-court, 1 Erysipelas	1
Draper's-court, 1 Diarrhœa	1
Drury-street, 1 Typhoid Fever	1
Dufour-court, 1 Whooping Cough	1
Duffy's-court, 1 Measles	1
Duffy's-cottages, 2 Measles, 1 Whooping Cough, 1 Diarrhœa	4
Earl-street, North, 1 Erysipelas, 1 Diarrhœa	2
Earl-street, South, 3 Typhoid Fever, 2 Measles, 1 Diarrhœa, 2 Whooping Cough	8
Earlsfort-terrace, 1 Scarlatina	1
Eblana-terrace, 1 Typhoid Fever, 3 Measles	4
Eblana-villas, 1 Undefined Fever, 2 Diarrhœa, 1 Typhoid Fever	4

	Cases
Ebenezer-terrace, 1 Measles, 1 Erysipelas	2
Eden-quay, 1 Typhoid Fever	1
Eccles-street, 1 Scarlatina, 1 Whooping Cough, 4 Diphtheria, 1 Diarrhœa, 1 Measles	8
Elliott-place, 1 Erysipelas	1
Ellis's-quay, 2 Typhoid Fever	2
Ellis's-street, 1 Erysipelas	1
Emerald-square, 2 Typhoid Fever, 1 Measles	3
Emmet-street, 2 Typhoid Fever, 4 Measles, 5 Whooping Cough	11
Emmet-square, 1 Typhoid Fever	1
Emmet-terrace, 1 Typhoid Fever	1
Emorville-avenue, 1 Scarlatina, 1 Typhoid Fever	2
Emorville-terrace, 1 Erysipelas	1
Emerald-square, 1 Scarlatina, 2 Typhoid Fever	3
Emerald-terrace, 1 Typhoid Fever, 1 Measles, 1 Scarlatina	3
Emor-street, 1 Measles	1
Elizabeth-place, 1 Typhoid Fever	1
Empress-terrace, 1 Typhoid Fever	1
Erne-street, Lower, 4 Erysipelas, 1 Undefined Fever, 2 Typhoid Fever, 3 Measles, 2 Scarlatina	12
Erne-street, Upper, 11 Whooping Cough, 3 Diarrhœa, 2 Typhoid Fever, 1 Dysentery, 1 Erysipelas, 1 Scarlatina	19
Erne-court, 1 Measles	1
Erne-place, 1 Whooping Cough	1
Erne-terrace, 1 Typhoid Fever, 2 Diarrhœa, 1 Whooping Cough	4
Essex-quay, 1 Measles, 4 Typhoid Fever	5
Essex-street, East, 10 Typhoid Fever, 2 Measles, 1 Undefined Fever, 1 Cholera Nostros	14
Essex-street, West, 4 Typhoid Fever, 1 Typhus Fever	5
Eugene-street, 1 Whooping Cough, 1 Scarlatina	2
European Buildings, 1 Erysipelas, 2 Measles, 1 Whooping Cough	4
Exchange-street, Lower, 4 Typhoid Fever, 1 Croup	5
Exchange-street, Upper, 6 Scarlatina, 1 Typhoid Fever, 1 Measles	8

	Cases
Fade-street, 1 Erysipelas	1
Faithful-place, 1 Erysipelas, 1 Measles	2
Farrell's-court, 1 Erysipelas, 2 Undefined Fever ...	3
Fearon's-court, 1 Whooping Cough	1
Fingal-street, 1 Scarlatina, 1 Typhoid Fever, 1 Measles ...	3
Finn's-court, 1 Scarlatina	1
Fishamble-street 1 Diarrhœa, 1 Typhoid Fever, 1 Erysipelas	3
Fitzwilliam-place, 2 Scarlatina, 1 Whooping Cough ...	3
Fitzwilliam-lane, 1 Diarrhœa	1
Fitzwilliam-square, 1 Scarlatina, 1 Typhoid Fever ...	2
Fitzwilliam-street, Lower, 3 Diphtheria, 1 Scarlatina ...	4
Fitzgibbon-lane, 1 Erysipelas, 1 Undefined Fever ...	2
Fleet-street, 1 Typhoid Fever, 1 Measles	2
Florence-street, 1 Scarlatina	1
Fontenoy-street. 5 Typhoid Fever, 1 Scarlatina, 1 Diarrhœa, 2 Measles	9
Foster-place, 1 Scarlatina, 1 Erysipelas	2
Foster-terrace, 1 Scarlatina	1
Fountain-place, 1 Typhoid Fever	1
Fownes's-street, 1 Diarrhœa	1
Francis-street, 4 Erysipelas, 4 Scarlatina, 7 Measles, 3 Whooping Cough, 4 Typhoid Fever, 3 Diarrhœa ...	25
Frederick-court, 1 Diarrhœa	1
Frankfort-cottages, 3 Measles, 3 Whooping Cough ...	6
Frederick-lane, 1 Diarrhœa, 1 Undefined Fever ...	2
Fumbally-lane, 1 Erysipelas	1
Gaelic-street, 3 Typhoid Fever	3
Granby-place, 1 Typhoid Fever, 1 Undefined Fever, 1 Diphtheria, 1 Erysipelas, 2 Scarlatina, 1 Measles, 1 Diarrhœa	8
Ganly's-cottages, 1 Undefined Fever	1
Garden-lane, 3 Typhoid Fever, 5 Measles	8
Garden-terrace, 1 Scarlatina	1
Gardiner's-place, 1 Typhoid Fever, 1 Diarrhœa, 1 Measles	3
Gardiner's-lane, 1 Whooping Cough, 1 Erysipelas, 1 Measles	3

	Cases
Gardiner's-row, 1 Measles	1
Gardiner-street, Lower, 3 Measles, 7 Typhoid Fever, 2 Scarlatina, 3 Undefined Fever, 1 Whooping Cough, 2 Diarrhœa, 3 Erysipelas	21
Gardiner-street, Middle, 3 Whooping Cough, 2 Erysipelas, 2 Measles	7
Gardiner-street, Upper, 1 Typhoid Fever, 2 Measles ...	3
George's-place, 4 Whooping Cough, 5 Measles, 1 Diarrhœa	10
George's-hill, 2 Scarlatina, 1 Undefined Fever ...	3
George's-street, North Great, 1 Scarlatina, 2 Erysipelas, 1 Undefined Fever, 2 Measles, 2 Whooping Cough, 1 Diarrhœa	9
George's-street, South Great, 5 Scarlatina, 2 Measles, 3 Typhoid Fever, 2 Diarrhœa, 1 Whooping Cough ...	13
George's-quay, 1 Diphtheria, 4 Typhoid Fever, 6 Scarlatina, 1 Whooping Cough, 1 Erysipelas	13
Geraldine-street, 1 Scarlatina, 1 Typhoid Fever, 1 Undefined Fever	3
Gill-street, 1 Typhoid Fever	1
Glengariff-parade, 6 Measles, 1 Whooping Cough ...	7
Gloucester-street, Lower, 1 Scarlatina, 4 Erysipelas, 3 Typhoid Fever, 1 Diarrhœa, 6 Measles, 11 Whooping Cough, 1 Undefined Fever	27
Gloucester-street, Upper, 10 Typhoid Fever, 10 Whooping Cough, 6 Measles, 2 Scarlatina, 2 Erysipelas, 3 Diarrhœa, 1 Diphtheria	34
Gloucester-street, South, 3 Undefined Fever, 2 Measles, 2 Scarlatina, 1 Diarrhœa, 2 Erysipelas ...	10
Gloucester-place, North 2 Erysipelas, 2 Whooping Cough, 1 Undefined Fever, 1 Diarrhœa, 3 Typhoid Fever, 1 Scarlatina	10
Glorney's-buildings, 3 Whooping Cough, 2 Typhoid Fever, 1 Diarrhœa	6
Golden-lane, 7 Typhoid Fever, 4 Erysipelas, 3 Diarrhœa, 1 Measles, 1 Whooping Cough	16
Goldsmith-street, 1 Typhoid Fever, 3 Scarlatina ...	4

	Cases
Gordon-place, 1 Typhoid Fever, 2 Whooping Cough	3
Grantham-street, 1 Scarlatina, 1 Measles	2
Grattan-street, 1 Scarlatina, 1 Typhoid Fever, 4 Erysipelas	6
Grangegorman, 1 Scarlatina, 1 Typhoid Fever	2
Grant's-row, 2 Undefined Fever, 1 Erysipelas, 1 Diarrhœa	4
Granby-row, 1 Typhoid Fever, 1 Diphtheria	2
Granby-lane, 1 Diarrhœa, 1 Measles	2
Grafton-street, 1 Typhoid Fever, 1 Scarlatina, 1 Diphtheria	3
Grattan-court, 1 Diarrhœa	1
Grattan-terrace, 1 Typhoid Fever, 1 Erysipelas	2
Graham's-row, 2 Undefined Fever	2
Gray-street, 1 Diarrhœa, 1 Erysipelas	2
Green-street, 5 Undefined Fever, 3 Typhoid Fever, 1 Measles	9
Greek-street, 1 Erysipelas, 1 Diarrhœa, 1 Undefined Fever	3
Grand Canal, 1 Typhoid Fever	1
Grenville-street, 6 Whooping Cough, 8 Typhoid Fever, 2 Measles, 1 Diarrhœa, 1 Undefined Fever	18
Grenville-place, 1 Whooping Cough, 1 Scarlatina	2
Greenville-terrace, 6 Whooping Cough, 3 Typhoid Fever, 1 Measles	10
Greenore-terrace, 1 Undefined Fever, 2 Typhoid Fever	3
Guild-street, 3 Whooping Cough	3
Guinness's Trust Buildings, 1 Whooping Cough	9
Hamilton-row, 1 Croup, 1 Whooping Cough, 1 Typhoid Fever, 1 Scarlatina	4
Hackett's-court, 1 Typhoid Fever, 1 Measles, 1 Whooping Cough	3
Hammond-street, 1 Typhoid Fever, 2 Scarlatina, 1 Whooping Cough	4
Halston-street, 1 Diphtheria	1
Hamilton-street, 1 Measles	1
Hanbury-lane, 1 Measles, 1 Typhoid Fever, 1 Erysipelas	3
Hanover-street, East, 5 Erysipelas, 4 Measles, 2 Typhoid Fever, 1 Whooping Cough, 1 Undefined Fever, 1 Scarlatina, 1 Diarrhœa	15

	Cases
Hanover-street, West, 1 Typhoid Fever, 1 Measles	2
Hanover-square, 1 Typhoid Fever, 3 Erysipelas, 1 Measles	5
Hanover-lane, 1 Whooping Cough, 2 Measles	3
Hanover-parade, 1 Erysipelas	1
Harcourt-road, 1 Measles, 1 Scarlatina	2
Harcourt-street, 3 Scarlatina	3
Harcourt-terrace, 1 Diarrhœa, 1 Scarlatina	2
Harmony-row, 1 Erysipelas, 2 Diarrhœa	3
Harty-place, 2 Measles, 1 Typhoid Fever, 1 Diarrhœa, 1 Whooping Cough	5
Hardwicke-street, 1 Typhoid Fever, 1 Undefined Fever, 3 Measles	5
Hardwicke-place, 1 Whooping Cough	1
Harrington-street, 2 Scarlatina	2
Hawthorn-terrace, 2 Typhoid Fever	2
Hendrick-street, 3 Erysipelas	3
Healy's-place, 3 Measles	3
Herbert-street, 1 Erysipelas	1
Henrietta-street, 5 Typhoid Fever, 5 Whooping Cough, 4 Measles, 2 Erysipelas, 1 Undefined Fever	17
Henrietta-lane, 2 Whooping Cough, 1 Diarrhœa	3
Henrietta-place, 1 Whooping Cough	1
Henrietta-buildings, 2 Undefined Fever, 1 Whooping Cough	3
Henry-place, 2 Measles, 2 Diarrhœa	4
Hewitt's-cottages, 1 Erysipelas	1
Henry-street, 1 Erysipelas, 1 Typhoid Fever, 1 Scarlatina, 1 Measles	4
Heytesbury-place, 1 Erysipelas	1
Heytesbury-street, 3 Scarlatina, 1 Measles, 2 Typhoid Fever, 1 Whooping Cough	7
Hill-street, 5 Typhoid Fever, 4 Whooping Cough, 1 Erysipelas	10
High-street, 1 Whooping Cough, 1 Undefined Fever, 1 Scarlatina, 3 Measles. 3 Typhoid Fever, 3 Diarrhœa	12
Holles-street, 1 Erysipelas, 2 Typhoid Fever	3
Hoey's-court, 2 Typhoid Fever	2
Hughes'-buildings, 1 Whooping Cough, 4 Measles	5

	Cases
Hughes'-yard, 1 Diarrhœa	1
Innisfallen-parade, 1 Typhoid Fever, 1 Erysipelas, 1 Diarrhœa, 1 Whooping Cough	4
Island-street, 1 Erysipelas	1
Irwin-street, 1 Measles, 1 Diarrhœa	2
Irvine-crescent, 3 Typhoid Fever, 1 Undefined Fever, 1 Scarlatina	5
James's-lane, 1 Erysipelas	1
James's-street, 2 Typhoid Fever, 2 Measles, 1 Cholera Nostros, 1 Undefined Fever	6
James's-place, 7 Whooping Cough, 1 Diarrhœa	8
James's- terrace, 2 Whooping Cough, 1 Diarrhœa	3
Jane-place, Upper, 1 Typhus Fever, 2 Whooping Cough, 1 Typhoid Fever	4
Jane-place, Lower, 1 Erysipelas	1
Jane-villa, 1 Scarlatina	1
James's-street, East, 1 Scarlatina	1
Jervis-street, 3 Undefined Fever, 5 Whooping Cough, 5 Erysipelas, 2 Scarlatina, 1 Modified Small Pox, 1 Measles	17
John Dillon-street, 10 Measles, 3 Typhoid Fever, 2 Undefined Fever, 2 Erysipelas, 1 Scarlatina, 1 Croup	19
John's-lane, East, 1 Typhus Fever, 1 Measles, 1 Diarrhœa	3
Jones's-road, 1 Typhoid Fever, 2 Measles	3
Julian-place, 1 Whooping Cough, 1 Erysipelas	2
Kelly's-row, 1 Whooping Cough, 1 Measles	2
Kelly's-place, 1 Measles	1
Kevin-street, Cross, 1 Scarlatina, 2 Erysipelas, 1 Whooping Cough, 1 Measles, 1 Puerperal Fever	6
Kevin-street, Lower, 2 Typhoid Fever, 4 Measles, 1 Scarlatina, 2 Whooping Cough, 1 Undefined Fever, 1 Croup	11
Kevin-street, Upper, 8 Typhoid Fever, 4 Cholera Nostros, 2 Undefined Fever, 3 Scarlatina, 1 Whooping Cough, 2 Diarrhœa	20

	Cases
Kennedy's-court, 1 Whooping Cough	1
Kildare-place, 1 Erysipelas	1
Kildare-street, 1 Typhoid Fever, 1 Scarlatina, 1 Diarrhœa, 1 Erysipelas	
Killarney-parade, 1 Erysipelas	1
Killarney-terrace, 1 Typhoid Fever, 1 Scarlatina	2
Kilmainham Old, 1 Scarlatina	1
King-street, North, 5 Undefined Fever, 2 Whooping Cough, 2 Erysipelas, 1 Cholera Nostros, 1 Croup, 8 Typhoid Fever, 2 Diarrhœa, 1 Measles	22
King-street, South, 1 Typhus Fever, 4 Typhoid Fever, 1 Erysipelas	6
King's-cottages, 1 Typhoid Fever	1
Kingsland-park avenue, 1 Diarrhœa	1
Kingsland-parade, 1 Typhoid Fever, 1 Scarlatina, 1 Cholera Nostros	3
King's Inn-street, 3 Typhoid Fever, 1 Erysipelas, 1 Measles	5
Lad-lane, 1 Typhoid Fever	1
Lady-lane, 1 Diarrhœa	1
Langrishe-place, 1 Typhoid Fever, 1 Diarrhœa	2
Lamb-alley, 2 Diarrhœa	1
Leavey's-place, 1 Scarlatina	1
Lennox-lane, 1 Typhoid Fever	1
Lennox-place, 1 Scarlatina, 1 Measles, 4 Typhoid Fever	6
Lennox-street, 5 Typhoid Fever 1 Erysipelas, 1 Measles, 1 Whooping Cough	8
Leeson-place, 2 Whooping Cough, 2 Erysipelas, 3 Undefined Fever, 1 Scarlatina	8
Leeson-lane, 2 Undefined Fever, 2 Diarrhœa	4
Leeson-street, Lower, 2 Typhoid Fever, 2 Measles	4
Leland-place, 1 Whooping Cough	1
Leinster-market, 2 Measles	2
Leinster-avenue, 2 Whooping Cough	2
Leinster-street, 1 Erysipelas, 1 Scarlatina	2
Leitrim-place, 1 Typhoid Fever	1
Lemon-place, 1 Typhoid Fever	1

	Cases
Leo-street, 1 Measles	1
Liberty-lane, 1 Typhoid Fever	1
Liffey-street, Lower, 1 Typhoid Fever	1
Linenhall-street, 4 Undefined Fever, 2 Typhus Fever, 2 Typhoid Fever, 1 Erysipelas	9
Lincoln-place, 1 Undefined Fever, 1 Typhoid Fever	2
Lisburn-street, 1 Typhoid Fever, 2 Undefined Fever, 1 Diarrhœa	4
Lime-street, 1 Typhoid Fever	1
Long-lane, 1 Cholera Nostros, 1 Erysipelas, 2 Scarlatina	4
Longford-lane, 1 Typhoid Fever, 4 Whooping Cough	5
Longwood-avenue, 1 Typhoid Fever	1
Longford-street, 3 Measles, 3 Erysipelas, 1 Whooping Cough, 1 Typhoid Fever	8
Lombard-street, West, 2 Scarlatina, 1 Erysipelas, 1 Typhoid Fever, 1 Diphtheria	5
Lombard-street, East, 2 Typhoid Fever, 1 Scarlatina, 1 Undefined Fever, 1 Measles	5
Lord Edward-street, 1 Scarlatina	1
Love-lane, 2 Typhoid Fever, 1 Erysipelas, 1 Whooping Cough	4
Lurgan-street, 1 Whooping Cough, 1 Scarlatina, 2 Diarrhœa	4
Mackey's-terrace, 1 Whooping Cough	2
Malpas-terrace, 1 Typhoid Fever, 1 Whooping Cough	2
Malpas-street, 1 Typhoid Fever, 1 Erysipelas, 2 Whooping Cough	4
Maher's-court, 1 Undefined Fever	1
Maher's-place, 1 Scarlatina, 1 Whooping Cough	2
Mabbot-street, 2 Measles, 2 Diarrhœa, 1 Typhoid Fever, 1 Erysipelas, 5 Whooping Cough, 1 Undefined Fever	12
Manor-street, 3 Scarlatina, 1 Cholera Nostros	4
Mark's-lane, 1 Diphtheria, 2 Erysipelas, 1 Fever, 1 Measles, 1 Diarrhœa	6
Mark-street, 5 Erysipelas, 1 Diarrhœa	6
Mark's-place, 1 Scarlatina, 1 Typhoid Fever	2
Mark's-alley, 2 Measles, 1 Erysipelas, 2 Whooping Cough	5

	Cases
Mark's-court, 2 Typhoid Fever, 2 Undefined Fever, 2 Scarlatina	6
Martin-street, 1 Typhoid Fever	1
Margaret-place, 1 Scarlatina	1
Margaret-cottages, 1 Cholera Nostros, 2 Diarrhœa	3
Mary's-abbey, 1 Undefined Fever, 2 Typhoid Fever, 3 Measles, 1 Erysipelas	7
Mary's-lane, 2 Undefined Fever, 1 Diarrhœa	3
Mary-street, 3 Typhoid Fever, 1 Whooping Cough, 2 Undefined Fever, 1 Diarrhœa	7
Mary's-terrace, Church-road, 1 Typhoid Fever	1
Masterson's-cottages, 1 Measles	1
Masterson's-lane, 1 Enteric Fever	1
Marlborough-street, 8 Typhoid Fever, 1 Diphtheria, 1 Diarrhœa, 1 Croup, 2 Fever, 1 Erysipelas, 8 Scarlatina, 1 Measles...	23
Marlborough-place, 1 Undefined Fever, 1 Typhoid Fever, 1 Scarlatina	3
Marrowbone-lane, 1 Measles, 1 Scarlatina, 1 Typhoid Fever, 2 Erysipelas	5
Mater Hospital, 2 Scarlatina, 2 Typhoid Fever, 3 Erysipelas, 5 Diarrhœa, 1 Fever	13
Marshalsea Barracks, 2 Whooping Cough	2
Mayor-street, Upper, 1 Typhoid Fever, 5 Whooping Cough, 3 Erysipelas	9
Mayor-street, lower, 1 Whooping Cough, 1 Erysipelas	2
Meath-place, 1 Measles	1
Meath Hospital, 2 Typhoid Fever	2
Meath-street, 3 Erysipelas, 5 Whooping Cough, 1 Diarrhœa, 4 Typhoid Fever, 12 Measles, 1 Scarlatina	26
Meath-terrace, 1 Measles	1
Meath-square, 5 Measles, 1 Typhoid Fever, 3 Whooping Cough	9
Meade's-cottages, 1 Typhoid Fever	1
Merchants'-quay, 2 Typhoid Fever	2
Mercer-street, Upper, 2 Typhoid Fever, 2 Erysipelas, 4 Diarrhœa, 1 Whooping Cough	9

	Cases
Mercer-street, Lower, 1 Erysipelas, 1 Typhoid	2
Merrion-place, 3 Erysipelas	3
Merrion-square, 1 Typhoid Fever, 2 Scarlatina	3
M'Clean's-lane, 1 Choleraic Infection, 2 Undefined Fever, 1 Measles	4
Michael's-lane, 1 Erysipelas, 1 Whooping Cough, 2 Diarrhœa	4
Mill-lane, 1 Typhoid Fever	1
Mitchell's-court, 1 Whooping Cough	1
Michael's Hill, 3 Measles, 1 Diarrhœa	4
Miller's-court, 1 Measles	1
M'Guinness's-place, 1 Whooping Cough, 1 Erysipelas, 1 Fever, 2 Measles, 2 Diarrhœa, 1 Cholerine	8
Montague-lane, 1 Whooping Cough	1
Montague-Court, 1 Erysipelas	1
Montague-street, 4 Whooping Cough	1
Montague-place, 1 Whooping Cough	1
Moland-cottages, 2 Undefined Fever	2
Moland-place, 1 Diarrhœa, 1 Erysipelas	2
Montpelier-hill, 3 Typhoid Fever, 1 Scarlatina	4
Molesworth-place, 1 Measles, 1 Diarrhœa	2
Moore-row, 1 Erysipelas	1
Moore-street, 1 Measles	1
Moore-market, 1 Typhoid Fever	1
Moore-cottages, 1 Scarlatina	1
Moss-street, 1 Whooping Cough, 1 Measles, 4 Erysipelas	6
Molesworth-street, 1 Scarlatina, 2 Measles	3
Mount-street, Lower, 1 Diarrhœa, 2 Typhoid	3
Mount-street, Upper, 2 Measles, 1 Typhoid, 1 Scarlatina	4
Mountjoy Brewery (Gatehouse), 2 Scarlatina	2
Montgomery-street, 3 Erysipelas, 2 Typhoid, 3 Measles, 1 Scarlatina, 1 Diarrhœa	10
Mountjoy-street, 2 Measles, 6 Typhoid Fever, 1 Fever, 1 Cholera Nostros	10
Mountjoy Prison Cottages, 11 Whooping Cough, 5 Typhoid Fever	16

	Cases
Mountjoy Prison, 1 Erysipelas	1
Mountjoy-place, 1 Erysipelas	1
Mountjoy-square, 1 Measles, 1 Scarlatina	2
Mountjoy-court, 1 Measles	1
Munster-street, 2 Typhoid Fever	2
Mountrath-street, 1 Scarlatina	1
Murphy's-cottages, 1 Diarrhœa, 1 Erysipelas, 1 Whooping Cough	3
Muckross-parade, 1 Whooping Cough	1
Myler's-alley, 1 Measles, 1 Typhoid, 1 Whooping Cough ...	3
Mulgrave-place, 1 Diarrhœa	1
Nassau-street, 1 Typhoid Fever, 1 Measles, 1 Puerperal Fever	3
Nelson-street, 3 Measles	3
Newmarket, 2 Erysipelas, 1 Typhoid Fever, 1 Measles, 1 Whooping Cough	5
Nerney's-court, 1 Erysipelas, 2 Whooping Cough, 1 Typhoid Fever, 1 Measles	5
New-street, 3 Undefined Fever, 1 Cholera Infantum, 7 Typhoid Fever, 1 Whooping Cough, 1 Scarlatina, 1 Measles, 1 Diarrhœa, 2 Erysipelas	17
Newcomen-court, 1 Undefined Fever, 3 Typhoid Fever, 1 Whooping Cough	5
Newfoundland-street, 1 Undefined Fever	1
New-row, 6 Measles, 1 Whooping Cough, 1 Erysipelas, 1 Diarrhœa, 1 Typhoid Fever	10
Neill's-cottages, 1 Scarlatina	1
Nicholas-place, 1 Typhoid Fever	1
Nicholas-street, 2 Whooping Cough, 3 Typhoid Fever, 3 Diarrhœa, 1 Measles, 1 Scarlatina	10
Nixon-street, 1 Erysipelas	1
Northbrook-avenue, 1 Scarlatina	1
Northumberland-square, 1 Erysipelas, 1 Scarlatina ...	2
North Wall, 2 Typhoid Fever	2
North Strand-road, 2 Typhoid Fever, 3 Scarlatina, 1 Diarrhœa	6

	Cases
O'Connell-street, 2 Scarlatina, 1 Undefined Fever	3
O'Connell-avenue, 2 Measles	2
O'Neill's-cottages, 1 Scarlatina	1
Oriel-street, Upper, 3 Typhoid Fever, 1 Whooping Cough, 1 Erysipelas, 1 Diarrhœa, 1 Scarlatina	7
Orchard-cottages, 1 Typhoid Fever, 1 Diarrhœa, 1 Scarlatina	3
Ormond-quay, Lower, 1 Measles, 1 Scarlatina, 1 Erysipelas	3
Ormond-quay, Upper, 3 Typhoid Fever, 2 Undefined Fever, 1 Scarlatina	6
Ormond-market, 1 Typhoid Fever, 1 Measles	2
Orr's-terrace, 1 Scarlatina	1
Paradise-place, 1 Erysipelas	1
Parkgate-street, 2 Erysipelas, 1 Scarlatina	3
Parnell-terrace, 2 Erysipelas, 1 Measles, 1 Scarlatina,	4
Patrick's-Place, 1 Whooping Cough	1
Patrick-street, 3 Typhoid Fever, 1 Undefined Fever, 5 Measles, 1 Erysipelas, 4 Whooping Cough, 5 Diarrhœa	19
Patrick-terrace, 1 Typhoid Fever, 1 Measles	2
Paul's-cottages, 1 Croup	1
Pembroke-lane, 2 Typhoid Fever	2
Pembroke-street, Upper, 1 Scarlatina	1
Pembroke-place, 1 Typhoid Fever	1
Peter-street, 1 Erysipelas, 1 Typhoid Fever, 1 Whooping Cough, 1 Cholera Infantum, 1 Diarrhœa	5
Peter's-row, 1 Whooping Cough	1
Peterson's-lane, 2 Erysipelas, 1 Measles, 1 Undefined Fever, 1 Scarlatina, 1 Diarrhœa	6
Pill-lane, 6 Undefined Fever, 2 Typhoid Fever, 2 Diarrhœa, 1 Measles	11
Phœnix-street, 1 Typhoid Fever	1
Pile's-terrace, 1 Erysipelas, 1 Diarrhœa	2
Pimlico, 4 Typhoid Fever, 1 Measles, 2 Erysipelas, 1 Scarlatina	8
Pitt-street, 2 Typhoid Fever, 2 Measles. 5 Scarlatina. 1 Undefined Fever, 2 Whooping Cough, 1 Scarlatina	13
Phibsborough-avenue, 3 Undefined Fever	3

	Cases
Phibsborough-road, 4 Typhoid Fever, 1 Scarlatina, 1 Measles	6
Pleasant-street, 1 Measles, 1 Typhoid Fever	2
Poole-street, 1 Whooping Cough, 1 Measles	2
Poolbeg-street, 3 Erysipelas, 1 Typhoid Fever	4
Poplar-place, 1 Scarlatina	1
Portland-row, 2 Whooping Cough	2
Portland-place, 1 Scarlatina, 3 Whooping Cough, 1 Measles	5
Portland-street, 2 Typhoid Fever, 2 Scarlatina, 1 Erysipelas	5
Portobello-harbour, 1 Typhoid Fever	1
Portobello-road, 2 Scarlatina, 1 Erysipelas	3
Power's-court, 3 Erysipelas, 1 Typhoid Fever, 2 Scarlatina, 2 Diphtheria	8
Prebend-street, 1 Whooping Cough	1
Prince's-street, 3 Erysipelas	3
Prussia-street, 2 Typhoid Fever, 3 Scarlatina	5
Pugh's-court, 6 Whooping Cough, 1 Erysipelas	7
Quay-view-place, 1 Whooping Cough	1
Queen's-square, 1 Erysipelas, 1 Scarlatina, 6 Whooping Cough, 6 Typhoid Fever, 1 Measles, 1 Croup	16
Queen-street, 2 Undefined Fever, 1 Typhoid Fever	3
Queen's-terrace, 1 Whooping Cough, 1 Measles, 1 Diarrhœa	3
Quinn's-cottages, 1 Typhoid Fever	1
Quinn's-lane, 1 Typhoid Fever, 1 Erysipelas	2
Railway-terrace, 2 Typhoid Fever, 1 Erysipelas	3
Ralph Macklin Schools, 1 Typhoid Fever	1
Raymond-street, 1 Diphtheria, 1 Typhoid Fever	2
Reilly's-cottages, 1 Erysipelas, 1 Whooping Cough	2
Repeal-place, 1 Measles, 1 Erysipelas, 1 Diarrhœa	3
Reginald-street, 1 Erysipelas, 1 Measles	2
Redmond's-hill, 1 Diarrhœa	1
Rialto-place, 1 Scarlatina, 1 Typhoid Fever	2
Rialto-buildings, 4 Typhoid Fever, 3 Scarlatina	7
Richmond-place, North, 1 Morbile, 1 Whooping Cough	2
Richmond-hill, 1 Erysipelas	1

	Cas
Richmond-street, South, 1 Fever, 2 Typhoid Fever, 2 Measles, 2 Erysipelas	7
Richmond-parade, 1 Typhoid Fever	1
Richmond-place, South, 1 Erysipelas, 1 Measles	2
Richmond-terrace, 1 Measles	1
Richmond-street, North, 1 Measles	1
Richmond Lunatic Asylum, 3 Scarlatina, 17 Typhoid Fever, 14 Dysentery, 1 Erysipelas, 8 Diarrhœa	43
Riddle's-row, 1 Measles	1
Richardson's-cottages, 1 Erysipelas	1
Ringsend-basin (Dogs' Home), 1 English Cholera	1
Rock-lane, 1 Whooping Cough	1
Ross-lane, 1 Diarrhœa	1
Robert-street, 2 Typhoid Fever, 1 Scarlatina	3
Rogerson's-quay 2 Typhoid Fever, 4 Diarrhœa, 1 Undefined Fever, 1 Whooping Cough	8
Rorke's-cottages, 1 Whooping Cough	1
Rotundo Hospital, 1 Measles	1
Royal-terrace, 1 Erysipelas	1
Royal-row, 3 Undefined Fever, 2 Typhoid Fever, 1 Diarrhœa	6
Rotundo-market, 1 Whooping Cough, 1 Fever	2
Russell-terrace, 1 Typhoid Fever	1
Russell-place, 1 Undefined Fever	1
Russell-street, 1 Erysipelas, 1 Typhoid Fever	2
Rutland-place, 1 Measles	1
Rutland-square, 1 Typhoid Fever, 1 Scarlatina	2
Rutland-cottages, 3 Typhoid Fever	3
Rutland-street, Upper, 3 Typhoid Fever, 1 Measles, 1 Diarrhœa, 3 Erysipelas	8
Rutland-street, Lower, 1 Whooping Cough, 2 Erysipelas, 4 Typhoid Fever, 5 Measles, 2 Diarrhœa	14
Rutledge-terrace, 1 Typhoid Fever	1
Ryan's-buildings, 1 Typhoid Fever, 1 Undefined Fever	2
Ryder's-row, 4 Whooping Cough, 1 Erysipelas	5
Sackville-avenue, 1 Typhoid Fever	1

	Cases
Sackville-place, 1 Erysipelas	1
Sackville-lane, 1 Erysipelas	1
Sandwith-place, 1 Undefined Fever, 3 Typhoid Fever, 3 Measles, 2 Whooping Cough	9
Sandwith-court, 2 Typhoid Fever, 1 Diarrhœa	3
Sandwith-lane, 2 Typhoid Fever, 1 Diarrhœa, 1 Measles, 1 Erysipelas	5
Sandwith-street, 10 Typhoid Fever, 2 Measles, 1 Erysipelas, 5 Diarrhœa	18
Seville Cottages, 3 Whooping Cough, 2 Typhoid Fever	5
Seville-lane, 1 Undefined Fever	1
Seville-place, 7 Typhoid Fever, 2 Whooping Cough	9
Santa Fé-terrace, 1 Typhoid Fever	1
Shamrock-avenue, 1 Typhoid Fever	1
Shamrock-street, 1 Typhoid Fever	1
School-street, 2 Typhoid Fever, 1 Measles	3
Shaw-villa, 1 Typhoid Fever	1
Sarsfield-street, 1 Typhoid Fever	1
Sarsfield-terrace, 1 Typhoid Fever	1
Shaw's Cottages, 1 Enteric Fever, 1 Undefined Fever	2
Shelbourne Hotel, 2 Scarlatina	2
Sherrard-avenue, 2 Typhoid Fever, 1 Cholera Nostros	3
Sherrard-street, 5 Measles	5
Sheriff-place, 1 Whooping Cough	1
Ship-street, Little, 1 Measles, 1 Erysipelas	2
Ship-street, Great, 1 Whooping Cough, 2 Erysipelas, 4 Typhoid Fever, 2 Diarrhœa, 4 Measles	13
Smithfield, 1 Erysipelas, 1 Typhoid Fever	2
Spencer-street, 1 Enteric Fever, 1 Undefined Fever	2
Spencer-place, 2 Undefined Fever	2
Spitalfields, 1 Diarrhœa	1
Spring Garden-street, 1 Typhoid Fever	1
Spring Garden-passage, 1 Typhoid Fever, 1 Undefined Fever	2
Spencer-avenue, 3 Whooping Cough, 1 Diarrhœa	4
Spooner's-cottages, 1 Diarrhœa	1
Stafford-street, 8 Typhoid Fever, 3 Undefined Fever, 3 Diarrhœa	14

	Cases
Stamer-street, 1 Erysipelas, 1 Typhoid Fever, 1 Measles	3
Stephen's-green, 6 Scarlatina, 3 Measles, 2 Typhoid Fever	11
Stephen-street, Lower, 1 Undefined Fever, 1 Whooping Cough, 2 Erysipelas, 1 Measles, 2 Typhoid Fever	7
Stephen-street, Upper, 2 Measles, 1 Erysipelas, 1 Scarlatina	4
Stephen-place, 9 Whooping Cough	9
Sterling-street, 3 Measles, 1 Whooping Cough	4
Store-street Police Station, 1 Typhoid Fever	1
Stoney-road, 1 Typhoid Fever	1
Storey's Cottages, 1 Whooping Cough	1
Strong's-court, 4 Whooping Cough, 1 Diarrhœa	5
Strand-street, 3 Whooping Cough, 3 Measles, 3 Typhoid Fever, 3 Undefined Fever, 1 Diarrhœa	13
Strandville-avenue, 1 Undefined Fever, 1 Typhus Fever, 1 Erysipelas	3
St. Andrew-street, 1 Erysipelas, 1 Whooping Cough	2
St. Augustine-street, 5 Typhoid Fever, 2 Whooping Cough, 1 Erysipelas, 1 Diarrhœa	9
St. Alban's-road, 2 Typhoid Fever, 1 Scarlatina	3
St. Bridget's-avenue, 1 Undefined Fever, 1 Typhoid Fever	2
St. Clare's-terrace, 1 Erysipelas	1
St. Ignatius'-road, 4 Typhoid Fever, 1 Whooping Cough, 2 Measles	7
St. Joseph's-terrace, 2 Measles	2
St. James'-terrace, 1 Typhoid Fever	1
St. John's-terrace, 1 Typhoid Fever	1
St. John's-street, 1 Erysipelas, 1 Typhoid, 1 Whooping Cough	3
St. James'-avenue, 1 Scarlatina	1
St. Joseph's-road, 1 Typhoid Fever	1
St. Kevin's-parade, 1 Scarlatina, 1 Diarrhœa, 3 Typhoid Fever, 1 Typhus, 1 Undefined Fever	7
St. Kevin's-road, 1 Typhoid Fever	1
St. Mark's Hospital, 1 Measles, 1 Erysipelas, 2 Enteric Fever	4
St. Mary's-avenue, 3 Undefined Fever	3

	Cases
St. Mary's-place, 2 Typhoid Fever	2
St. Mary's-terrace, 1 Undefined Fever, 2 Erysipelas, 1 Croup, 1 Measles, 1 Whooping Cough	6
St. Michael's-terrace, 3 Measles	3
St. Patrick's-place, 1 Measles	1
St. Vincent-street, 3 Typhoid Fever	3
Summer-street, North, 2 Undefined Fever, 3 Whooping Cough	5
Summer-place, 1 Croup, 1 Whooping Cough	2
Summerhill, 1 Cholera Nostros, 10 Diarrhœa, 9 Typhoid Fever, 5 Measles, 25 Whooping Cough, 6 Undefined Fever, 6 Scarlatina, 7 Erysipelas	69
Summerhill-parade, 2 Typhoid Fever, 1 Scarlatina, 1 Undefined Fever, 2 Erysipelas	6
Summerhill-place, 1 Undefined Fever, 3 Typhoid Fever	4
Swift's-alley, 3 Typhoid Fever, 1 Measles	4
Swift's-row, 1 Typhoid Fever	1
Sycamore-street, 1 Undefined Fever	1
Suffolk-street, 4 Whooping Cough	4
Synnott-place, 1 Whooping Cough	1
Sullivan-street, 1 Erysipelas	1
Sullivan-court, 1 Diarrhœa	1
Talbot-place, 1 Erysipelas, 1 Scarlatina, 1 Typhoid Fever, 1 Measles	4
Talbot-street, 3 Typhoid Fever, 3 Scarlatina, 1 Erysipelas	7
Tara-street, 1 Erysipelas, 1 Diphtheria, 1 Typhoid Fever	3
Temple cottages, 1 Typhoid Fever, 1 Undefined Fever	2
Temple-bar, 1 Typhoid Fever, 1 Scarlatina, 1 Erysipelas	3
Temple-lane, 2 Measles, 1 Scarlatina, 1 Typhoid Fever	4
Temple-street; 1 Scarlatina, 4 Measles	5
Temple-buildings, 1 Whooping Cough, 1 Typhoid Fever, 1 Erysipelas, 1 Undefined Fever	4
Tenter's-lane, 1 Typhoid Fever	1
Tighe's-cottages, 1 Whooping Cough	1
Thomas Davis-street, 1 Typhoid Fever	1
Thomas-court, 1 Typhoid Fever, 1 Measles	2

	Cases
Thomas-street, 5 Typhoid Fever, 1 Measles, 1 Scarlatina, 3 Whooping Cough, 1 Erysipelas, 1 Diarrhœa	12
Toole's-court, 2 Erysipelas, 1 Undefined Fever, 1 Whooping Cough	4
Townsend-street, 7 Undefined Fever, 12 Measles, 6 Erysipelas, 2 Typhoid Fever, 1 Croup, 2 Diarrhœa, 1 Puerperal Fever, 3 Whooping Cough	34
Tranquilla-terrace, 1 Measles	1
Trinity College, 1 Scarlatina	1
Trinity-street, 1 Croup, 1 Measles, 1 Whooping Cough	3
Tyrone-street, Upper, 4 Undefined Fever, 7 Whooping Cough, 2 Typhoid Fever, 2 Measles, 4 Erysipelas, 4 Diarrhœa, 1 Scarlatina	24
Tyrone-street, Lower, 1 Undefined Fever, 4 Whooping Cough, 2 Diarrhœa, 2 Erysipelas, 1 Diphtheria, 1 Measles	11
Union, South Dublin, 28 Measles, 4 Scarlatina, 4 Erysipelas	36
Usher-street, 1 Scarlatina, 1 Measles	2
Usher's-quay, 5 Typhoid Fever, 3 Diarrhœa, 1 Scarlatina, 1 Cholera Nostros, 1 Undefined Fever	11
Uxbridge, 1 Diarrhœa	1
Valentia-parade, 2 Typhoid Fever	2
Vance's-buildings (Bishop-street), 3 Measles, 4 Whooping Cough, 2 Diarrhœa, 1 Typhoid Fever, 1 Erysipelas	11
Vance's-buildings (Bridge-street), 2 Cholera Nostros, 1 Scarlatina, 1 Erysipelas	4
Vauxhall-cottage, 1 Typhoid Fever	1
Vicar-street, 3 Typhoid Fever, 1 Erysipelas, 1 Whooping Cough	5
Victoria-street, 2 Scarlatina	2
Victoria-terrace, 1 Scarlatina	1
Villa-bank, 1 Whooping Cough	1
Verschoyle-court, 2 Whooping Cough	2
Verschoyle-place, 1 Undefined Fever	1
Wall's-lane, 2 Measles	2
Wall's-square, 2 Whooping Cough	2
Walsh's-cottages, 2 Whooping Cough	2

	Cases
Walton-terrace, 1 Scarlatina	1
Walker's-alley, 1 Undefined Fever	1
Ward's-hill, 1 Whooping Cough, 2 Measles	3
Warren-street, 4 Measles, 1 Scarlatina, 3 Typhoid Fever, 1 Diarrhœa	9
Warrington-place, 1 Scarlatina, 1 Erysipelas	2
Washington-street, 2 Typhoid Fever	2
Watkins'-buildings, 1 Typhoid Fever, 3 Whooping Cough, 1 Scarlatina, 1 Erysipelas	6
Watling-street, 1 Diarrhœa	1
Water-row, 1 Undefined Fever, 1 Measles	2
Wellington-place, 1 Typhoid Fever, 1 Undefined Fever ...	2
Wellington-street, Upper, 6 Typhoid Fever, 3 Undefined Fever, 5 Erysipelas, 2 Whooping Cough ...	16
Wellington-street, Lower, 1 Typhoid Fever, 1 Scarlatina ...	2
Wellington-quay, 4 Typhoid Fever, 1 Erysipelas ...	5
Wellington Barracks, 2 Scarlatina	2
Wentworth-place, 9 Scarlatina, 1 Typhoid Fever, 2 Measles, 2 Whooping Cough	14
Wentworth-terrace, 2 Typhoid Fever, 1 Scarlatina, 1 Erysipelas 1 Diarrhœa	5
Werburgh-street, 1 Scarlatina, 1 Diarrhœa, 1 Diphtheria, 1 Whooping Cough	4
Westland-row, 1 Erysipelas, 1 Scarlatina	2
West-road, 1 Whooping Cough	1
Wesley College, 3 Scarlatina, 2 Measles, 1 Erysipelas ...	6
Wexford-street, 1 Scarlatina, 1 Measles, 1 Diarrhœa, 1 Erysipelas	4
Whitefriar-street, 4 Measles, 1 Whooping Cough, 2 Typhoid Fever, 1 Erysipelas 1 Diarrhœa	9
White's-lane, 1 Diarrhœa, 1 Erysipelas	2
White's-cottages 1 Measles	1
Wicklow-street, 1 Scarlatina, 1 Erysipelas, 1 Undefined Fever, 1 Whooping Cough, 3 Typhoid Fever ...	7
Williams'-place, North, 1 Typhoid Fever, 2 Erysipelas, 1 Diarrhœa	4

	Cases
Williams'-place, South, 3 Measles, 2 Erysipelas, 2 Typhoid Fever, 2 Whooping Cough...	9
Wicklow-lane, 4 Whooping Cough	4
Wilson's-cottages, 1 Erysipelas	1
Wilson's-place, 1 Typhoid Fever, 1 Scarlatina ...	2
William-street, North, 2 Typhoid Fever, 2 Measles, 1 Erysipelas, 1 Whooping Cough	6
William-street, South, 3 Typhoid Fever, 1 Scarlatina ...	4
Wilton-terrace, 1 Whooping Cough, 1 Typhoid Fever ...	2
Wilson's-place, 1 Erysipelas	1
Winetavern-street, 6 Measles, 1 Undefined Fever, 2 Erysipelas, 1 Diarrhœa, 2 Typhoid Fever, 4 Whooping Cough	16
Windsor-place, 1 Scarlatina	1
Windsor-terrace, 1 Scarlatina, 1 Whooping Cough ...	2
Wodehouse-terrace, 3 Scarlatina	3
Wood-quay, 4 Typhoid Fever, 1 Measles, 1 Diarrhœa ...	6
Wormwood-gate, 4 Typhoid Fever	4
Yarnhall-street, 1 Undefined Fever	1
York-street, 2 Scarlatina, 2 Erysipelas, 1 Typhoid Fever, 1 Diarrhœa, 1 Measles, 1 Whooping Cough ...	8

SUMMARY.

Typhoid Fever	1,001
Whooping Cough	669
Measles	615
Erysipelas	442
Scarlatina	383
Diarrhœa	325
Undefined Fever	313
Diphtheria	32
Cholera Nostros	21
Croup	18
Typhus Fever	17
Puerperal Fever	5
Cholera Infantum	3
Modified Smallpox (Varicella ?) ...	2
Total,	3,846 cases.

INSPECTION OF TENEMENT HOUSES, &c.

The houses occupied by more than one family, and the poorer classes of cottages, have been regularly inspected during the year. On the whole their sanitary condition has been improved. Whilst the number of sanitary defects has been up to the average, they have not, on the whole, been of so serious a character as those reported upon in former years. A noticeable feature in the returns for 1893, is the large reduction in the number of summonses issued for the abatement of nuisances, &c. In 1892, the number of convictions for ordinary sanitary offences against the Public Health Act, was 3,159 ; in 1893, it was reduced to 2,331, or 828 less.

THE TENEMENT HOUSES OF LONDON AND DUBLIN CONTRASTED.

Some years ago the tenement houses of Dublin were in a very bad condition. A substantial proportion of them were without any sanitary accommodation, and in by far the greater proportion of the remainder defective privies and roofless ashpits were the rule. During the last dozen years 2,700 of the 8,000 houses, in which 60 per cent. of the inhabitants of Dublin resided, have been detenanted and closed by Magistrates' orders, obtained by the Sanitary Authorities. About 350 of these houses have completely disappeared, and will never be rebuilt, as they were situated on sites unsuited for dwellings. Several hundreds have also disappeared, and their sites have not yet been built upon. The remaining houses have been rebuilt or repaired sufficiently to permit of their being re-opened to tenants. Of the 4,300 houses which were never closed, very few have not been subjected to notices to have nuisances and defects in them abated and remedied.

With respect to the tenement houses of the present day, I maintain that they are in, at least, as good order as the tenement houses of the same class in London and other large towns.

During a visit to London last winter, I spent a considerable time in examining tenement houses, and I did not find that they were kept in a better state than they are in Dublin, though their rents are nearly twice as great.

In the extreme east of London the working classes seemed to me to be better housed than in the west and north-west districts: no doubt because in the former their dwellings were built specially for them, whilst in the latter the tenements are, as in the case of Dublin, chiefly old houses, originally built each for one family. It seemed to me that a comparison between the tenement houses of Dublin and those of London, in the Strand, Shoreditch, St. Giles and Holborn districts, would be a fair one, and I accordingly made a pretty extensive examination of those London districts.

The following is a general state of things in the tenements occupied by the poor and poorest classes:—The houses, so far as stairs, lobbies, and halls are concerned, are more frequently dirty than clean. The hall-door is open day and night: The water-closet is practically *pro bono publico,* and is generally not clean. The rent for a single room varies from 2s. 6d. to 4s. 6d., and is generally about 3s. 6d. For example: I take a house at the corner of Wild's-court, Wild-street, St. Giles. The front parlour is a small room, in bad order, and brings 4s. 6d. per week rent. The hall-door is, apparently, always open. The hall is dirty. The yard is about 6 feet long and 6 feet wide. The water-closet is wet and dirty. The pavement of the yard is much broken, and the fissures filled with filthy liquid. In Wild's-court I saw about the worst value for the rents paid which has ever come under my observation. At Verulam-street, Gray's Inns-road, I noticed some very bad tenement houses. The small back parlour of one of them (rent, 2s. 6d. per week) was, the occupier stated, swarming with rats. The state of the little yards and water-closets of some of these houses was extremely bad. For two tiny rooms, 5s. per week was paid, and for two equally small ones another tenant paid 5s. 6d. a week.

In Union-terrace, Union Buildings, Holborn district, a state of things exists which would certainly not be tolerated in Dublin. Two stories of tenements are situated over cow-sheds. As there is no yard attached to the latter, the manure is placed in the street, in front of the sheds, and directly under the tenements. On the same place is deposited horse manure from stables, over which there are also two tiers of tenements, and the manure heap is the repository for the ashes, vegetable refuse, and other matters from the tenements. At the time of my inspection, about two-and-a-half tons of this stuff were being removed in a waggon, and the effluvia from it were very marked. Every day, except Sunday, the manure is removed. Some of the occupiers said that in summer the manure attracted myriads of bluebottle and other flies, which also swarmed into the houses. One occupant said the liquid from an upper story came down frequently into his apartment. For the use of the tenants there were two water-closets, both situated in rather dark places within the buildings. One of them was inaccessible, on account of its floor being covered with an offensive liquid. The other water-closet was in better order, but was wet. Inspector Ross, of the London

County Council, who was with me, had to strike a light to enable us to inspect the interior of this closet. These closets could be used by anyone besides the twenty-six families who occupied these wretched tenements. The rooms were small, and their height about 7 feet 3 inches.

It may appear strange that the cow-sheds referred to above had no yards attached to them, but this is the case with all the cow-sheds in London, except in the outlying districts. The manure is deposited in pits. I am bound to say that the cow-sheds which I saw were all very clean, and the manure appears to be regularly removed—as, indeed, is absolutely necessary, seeing that there is no yards to store it in, and that dwellings are always beside or even over the cow-sheds. I was informed by a cow-keeper that the manure produced in the inner parts of London was worth only the cost of carting it away, and that sometimes the cow-keeper had to pay for its removal. In London the Sanitary Authorities are empowered to remove cow manure and every other kind of trade refuse.

One point in connection with the London tenement houses is worth noting. In the vast majority of them the water used by the tenants is supplied from tanks placed on the roofs of the water-closets and beside the ashpits or bins. The tanks have lids, which, however, are generally loosely placed. Although the water supplies of the tenements are exposed in this way to danger of contamination from the ashpit and water-closet, yet typhoid fever is much less prevalent in London than in Dublin.

I asked a Medical Officer of Health why it was that some tenements which I saw were in so dilapidated and filthy a state. He replied that if they were put into good order to-day, a week hence they might be as bad as before. This observation applies equally to the low-class tenements of Dublin. A tenement house, in which the rooms are rented at about 1s. 6d. per week each, and with doors and water-closets open day and night, can be with difficulty maintained in a cleanly state. In Dublin, as in London and elsewhere, sanitary accommodation used in common by several families will seldom be properly kept.

I did not notice in London a single privy. Defective as the water-closets often are, when not restricted to the use of one family, yet, from a sanitary point of view, they are superior to the privy. It has been noticed throughout England and Scotland that the substitution of the water carriage system of excreta disposal for the privy and midden plan, has been invariably attended by reduction in the death-rate. The highest death-rates in England are still to be found in the towns in which the pail or privy system prevails. In conclusion, I reiterate my conviction, that the lower-class tenements in Dublin are kept in as good a condition as similar, but much more highly-rented, tenements in London, and indeed in other towns which I have visited. Even in our suburbs, such as Bray, Kingstown, and Blackrock, the tenement houses, though few in number, are, as I can prove, inferior to those in the City of Dublin. Unfortunately, however, whilst the low-class tenement houses in London constitute a comparatively small proportion of the total dwellings, in Dublin they are the homes of at least a third of the families of the whole city. Amongst the poor in all cities the mortality is high; the high death-rates of Dublin is mainly due not to an excessive fever death-rate, but to the poverty of a relatively large proportion of the population.

THE FOLLOWING SECOND EDITION OF MY INSTRUCTIONS TO SANITARY SUB-OFFICERS OF THE CORPORATION OF DUBLIN WAS ISSUED DURING THE YEAR.

INSPECTION OF TENEMENT HOUSES, NIGHTLY LODGING-HOUSES AND STABLES.

It is necessary to record the date of inspection of premises, and the state in which they are found. Notes must be taken at the time of the inspection of a nuisance, as it may be necessary to read them in court. When the note-books are filled up, they are to be delivered to the Superintendent, who will preserve them for reference.

PROCEEDINGS TO ABATE NUISANCES.

On discovering a nuisance, serve a notice forthwith to have it abated within a given time. At expiration of time specified, inspect to see if the nuisance has been abated; if it has not, serve forthwith a summons, to the police court, on the person or persons responsible for the nuisance. Having obtained a Magistrate's order for the abatement of the nuisance within a given time, inspect at the expiration of that time. If the nuisance continues, the person or persons responsible are to be forthwith summoned for disobedience of the Magistrate's order. If these means fail to abate the nuisance, report to Superintendent, with the view of the Sanitary Authorities themselves taking steps to abate the nuisance, at the cost of the responsible persons. All the necessary legal forms are to be had at the Sanitary Office, 17 Castle-street.

GENERAL CONDITION OF TENEMENT HOUSES.

They should be clean and in good repair. Broken windows and leaking roofs cause injury to health, by inducing colds, rheumatism, &c. Decayed floors should be renewed; patches which rise above the level of the floor should not be permitted, as they prevent the floor from being properly swept and washed. See that the roof gutters are clear, and that the rain is freely discharged from them into the rain-pipes (spouts). No gutter should be carried through the interior of the house. The spouts should deliver their contents over an open grating or channel-course, and not directly into a drain or sewer. The spout must never be used as a soil-pipe or a sewer or drain ventilator. If the following structural defects are noticed, they should be specially reported to the Medical Officer of Health:—Very steep stairs, rooms less than 7 feet in height, deficiency of light and ventilation of rooms, halls, stairs and lobbies; absence of yard or garden. When a room is found to be filthy, a notice to have it cleaned should be forthwith served on the *occupier of the room.* It is desirable that the Officer should notice those tenements habitually kept in a filthy state, and steps should be taken to enforce the cleanliness in them.

CUBIC SPACE.

The least space permissible for either adult or child is 300 cubic feet. It is necessary to ascertain the number of persons sleeping in a room, and the cubic contents of the room. The Inspector should have a tape line for measurement. The length of the room is multiplied by its breadth; this gives the square or linear surface. The figures so obtained, multiplied by the height, give the cubic contents—15 by 12 by 9 = 1,620. If five persons slept in the room having 1,620 cubic feet of space, each would have 324 cubic feet. Allowance must be made for projections into the room. These should be measured, and their cubic contents deducted from the cubic contents arrived at by measuring the length, breadth and height of the room. It will give some idea of the dimensions of a cubic foot to know that an average sized man occupies about 3 cubic feet of space. As there must be a proper relation between square and cubic spaces, a height in excess of 12 feet should not be counted. Ventilation of a room can be secured by having a small slip of wood placed below the lower window sash, so as to prevent it from being pulled completely below the upper one. This will secure a small inlet or outlet for air at the junction of the sashes. The Inspector should see that the sashes are movable, and that they can be lifted up or pulled down as the case may be.

Basement Story.

No one is permitted to sleep in an underground story except under the conditions specified in the following sections of the Public Health Act, 1878 :—

Regulations of Cellar Dwellings and Lodging-houses.

Occupation of Cellar Dwellings.

82. It shall not be lawful to let or occupy, or suffer to be occupied separately as a dwelling, any cellar (including for the purposes of this Act in that expression any vault or underground room) built or rebuilt after the passing of this Act, or which is not lawfully so let or occupied at the time of the passing of this Act.

83. It shall not be lawful to let or occupy, or suffer to be occupied separately as a dwelling, any cellar whatsoever, unless the following requisitions are complied with; (that is to say,)

Unless the cellar is in every part thereof at least seven feet in height, measured from the floor to the ceiling thereof, and is at least three feet of its height from the surface of the street or ground adjoining or nearest the same; and

Unless there is outside of and adjoining the cellar and extending along the entire frontage thereof, and upwards from six inches below the level of the floor thereof up to the surface of the said street or ground, an open area of at least two feet and six inches wide in every part; and

Unless the cellar is effectually drained by means of a drain, the uppermost part of which is one foot at least below the level of the floor thereof; and

Unless there is appurtenant to the cellar the use of a water-closet, earth-closet, or privy, and an ashpit furnished with proper doors and coverings, according to the provisions of this Act; and

Unless the cellar has a fireplace with a proper chimney or flue, and an external window or windows of such an area as shall be deemed sufficient by the sanitary authority, and made to open in a manner approved by the sanitary authority (except in the case of an inner or back cellar let or occupied along with a front cellar as part of the same letting or occupation, in which case the external window may be of any dimensions, not being less than four superficial feet in area clear of the sash frame):

Provided that in any area adjoining a cellar there may be steps necessary for access to such cellar, if the same be so placed as not to be over, across, or opposite to the said external window, and so as to allow between every part of such steps and the external wall of such cellar a clear space of six inches at the least, and that over or across any such area there may be steps necessary for access to any building above the cellar to which such area adjoins, if the same be so placed so as not to be over, across, or opposite to any such external window.

84. Any person who lets, occupies, or knowingly suffers to be occupied for hire or rent, any cellar contrary to the provisions of this Act, shall be liable for every such offence to a penalty not exceeding twenty shillings for every day during which the same continues to be so let or occupied after notice in writing from the sanitary authority in this behalf.

85. Any cellar in which any person passes the night shall be deemed to be occupied as a dwelling within the meaning of this Act.

86. Where two convictions against the provisions of any Act relating to the occupation of a cellar as a separate dwelling place have taken place with respect to the same cellar within three months (whether the persons so convicted were or were not the same), a court of summary jurisdiction may direct the closing of the premises so occupied for such time as it may deem necessary, or may empower the sanitary authority permanently to close the same, and to defray any expenses incurred by them in the execution of this section.

See that the area is provided with a proper and well-trapped drain. In disused basement stories see that no objectionable rubbish is allowed to remain. If the approach to the basement story be barred, access must be had to it by some means, for the purpose of inspection.

In the month of January in every year, the District Sanitary Sub-officer shall lodge with the Superintendent a list of cellars, and underground rooms occupied as dwellings, stating the conditions under which they are in occupation.

YARDS.

Small yards should be asphalted or concreted ; large ones should have a portion of their surface concreted, especially the approaches to the water-closet and ashbin. Means should be provided for carrying off the rain water. No accumulations of offensive rubbish should be permitted in yards.

SANITARY ACCOMMODATION AND DRAINS.

The Inspector is to exert himself to the uttermost to have privies and ashpits replaced by water-closets and portable ashbins.

For tenement houses, where water-closets are used by more than one family, only the most substantial kind of apparatus should be employed, and every family should be supplied with a key for the closet.

As little woodwork as possible should be in a water-closet. The floor should never be of wood. The best floor is asphalte ; the next best, good concrete. The floor and walls should be securely joined to prevent leakage under the latter.

Pan closets having a " container " or vessel interposing between the pan and the trap are objectionable. The best water-closets for tenement houses is the "short hopper" or "wash-down." They may be obtained in two pieces or in pedestal form: it is best made of enamelled iron. If furnished with a movable seat it may be used for slops. The seat is best fixed so that it is kept in a perpendicular position by means of a spring, and in a horizontal one when sat upon.

When notice is served upon the owner or occupier of a house to put in connection with it a water-closet, the Inspector should ascertain what form of this apparatus it is proposed to supply, and he should insist upon its being an effective and easily-worked one. He should see that the work of connecting the closet with the house drain and street sewer was properly carried out. The soil-pipes should be made of soft lead, and should be drawn together, and not soldered. The "wipe" joint is the best to use. Where iron pipes are employed, they should be pretty thick, and jointed with lead. A soil-pipe should be 3½ inches in diameter.

The best drains are earthenware pipes, with smooth internal glaze, 4 to 6 inches in diameter, and provided with flanges. They should be perfectly straight and free from cracks and other defects. The drains should be laid in as straight a line as possible. It is better not to bring a drain under the hall-door if there be a flight of steps leading to the latter. Care should be taken that the joints are properly cemented by Portland cement—particular attention being paid to the condition of the under part of the joint. The pipes should be laid down on a bed of concrete. A drain should never discharge its contents into another drain smaller than itself. The drain should have a fall of one foot in 40 feet. The pipes entering the drain should do so obliquely, that is, at an acute, and not a right angle. Work that is to be covered in should be left exposed until examined by the Inspector.

Scullery sinks should not be directly connected with drains.

To test the staunchness of the drain, plug its lower end, and pour water into the drain until it is filled up. If it remains filled for an hour the drain is staunch. The condition of old drains may be ascertained by pumping smoke into them after their ventilators have been closed. It often happens that smoke so applied leaks out at various points, showing defect. A negative result does not, however, ensure absence of leakages into the ground.

The ventilation of soil-pipes and drains is important, as it relieves pressure upon the traps. The soil-pipes should be carried up with undiminished bore to a point at least 3 feet above the eave of the house. It should be carried still higher, or on to the ridge of the roof, if it otherwise would end close to a window. Between the street sewer and the house there should be an untrapped opening, and on the house side of this opening a trap. A ventilating pipe, 4 inches in diameter, should terminate the highest point of the drain. It should be carried well over the eave of the house.

The drainage from yards and areas passes through traps into drains, the highest point of which should be about 2 feet from the surface. A bell trap should not be used ; the D trap is not much better. A good trap should consist of a stoneware chamber containing 2½ or 3 inches deep of water, and having a grating opening outwards, so as to admit of the cleansing of the trap. This trap belongs to the syphon class.

The Inspector should see that the cistern supplying the water-closet is placed sufficiently high above the latter so as to cause a good flush of water. He should note whether or not the water-closet is sufficiently roomy, and that it is ventilated by a small window or opening over the door. All trough water-closets, in which the water is brought directly from the water-pipe into the trough, should be abolished—such closets are likely to pollute the pipe-water. It is not desirable to encourage the construction of any form of trough closet.

Each water-closet should have its exclusive soil-pipe; sometimes two or more water-closets have a common pipe.

When a water-closet is found in a dark, unventilated part of a house, the circumstance should be reported.

A house having only a built drain is defined by the Dublin Corporation Act of 1890 (section 60), as one without an adequate drain. Serve notice to have built drains replaced by pipe-drains.

PUBLIC HEALTH ACT, 1878.

Sections relating to Sewers and Drains.

25. Where any house within the district of a sanitary authority is without a drain sufficient for effectual drainage, the sanitary authority may by written notice require the owner or occupier of such house, within a reasonable time therein specified, to make a covered drain or drains emptying into any sewer which the sanitary authority are entitled to use, and which is not more than one hundred feet from the site of such house; but if no such means of drainage are within that distance, then emptying into such covered cesspool or other place not being under any house as the sanitary authority direct; and the sanitary authority may require any such drain or drains, cesspool or cesspools, to be of such materials and size, and to be so ventilated, and to be laid at such level, and with such fall as may appear to them to be necessary: Provided that where, in the opinion of the sanitary authority, greater expense would be incurred in the construction of such cesspool or cesspools than in the making of a drain emptying into a sewer which they are entitled to use, the sanitary authority may require the owner or occupier to make such drain, notwithstanding that the sewer into which it is to empty is not within one hundred feet of the site of the house.

If such notice is not complied with, the sanitary authority may, after the expiration of the time specified in the notice, do the work required, and may recover in a summary manner the expenses incurred by them in so doing from the owner, or may by order declare the same to be private improvement expenses.

Provided that where, in the opinion of the sanitary authority, greater expense would be incurred in causing the drains of two or more houses to empty into an existing sewer pursuant to this section, than in constructing a new sewer and causing such drains to empty therein, the sanitary authority may construct such new sewer, and require the owners or occupiers of such houses to cause their drains to empty therein, and may apportion as they deem just the expenses of the construction of such sewer among the owners of the several houses, and recover in a summary manner the sums apportioned from such owners, or may by order declare the same to be private improvement expenses.

Privies, Water-Closets, etc.

50. Every sanitary authority shall provide that all drains, water-closets, sinks, lavatories, gully traps, earth-closets, privies, ashpits, and cesspools within their district be constructed, trapped, covered, ventilated, and kept so as not to be a nuisance or injurious to health.

51. On the written application of any person to a sanitary authority, stating that any drain, water-closet, earth-closet, privy, ashpit or cesspool on or belonging to any premises within their district is a nuisance or injurious to health (but not otherwise), it shall be lawful for any sanitary officer duly authorized in writing in thar behalf by such sanitary authority, after twenty-four hours' written notice to the occupier of such premises, or in case of emergency without notice, to enter such premises with or without assistants, and cause the ground to be opened, and examine such drain, water-closet, earth-closet, privy, ashpit, or cesspool. If the drain, water-closet, earth-closet, privy, ashpit or cesspool on examination is found to be in proper condition, he shall cause the ground to be closed, and any damage done to be made good as soon as can be, and the expenses of the works shall be defrayed by the person making the above-mentioned written application. If the drain, water-closet, earth-closet, privy, ashpit, or cesspool on examination appear to be in bad condition, or to require alteration or amendment, the sanitary authority shall forthwith cause notice in writing to be given to the owner or occupier of the premises, requiring him forthwith or within a reasonable time therein specified to do the necessary works; and if such notice is not complied with, the person to whom it is given shall be

liable to a penalty not exceeding ten shillings for every day during which he continues to make default, and the sanitary authority may, if they think fit, execute such works, and may recover in a summary manner from the owner the expenses incurred by them in so doing, or may by order declare the same to be private improvement expenses, as well as the expenses incurred in the previous examination.

57. Any person who in any sanitary district—

(1.) Keeps any swine or pig stye in any dwellinghouse, or so as to be a nuisance to any person; or

(2.) Suffers any waste or stagnant water to remain in any cellar or place within any dwelling-house for twenty four hours after written notice to him from the sanitary authority to remove the same; or

(3.) Allows the contents of any water-closet, privy, or cesspool to overflow or soak therefrom,

shall, for every such offence, be liable to a penalty not exceeding forty shillings, and to a further penalty not exceeding five shillings for every day during which the offence is continued, and the sanitary authority shall abate or cause to be abated every such nuisance, and may recover in a summary manner the expenses incurred by them in so doing from the occupier, or, in the case of houses let to weekly or monthly tenants, or in separate apartments, from the owner of the premises on which the nuisance exists.

BYELAWS

Relating to Construction of Ashpits.

85. Every person who shall construct an ashpit in connection with a building shall, as far as practicable, construct such ashpit in such a manner and in such a position as to afford ready means of access to such ashpit for the purpose of cleansing such ashpit, and of removing the contents thereof, and, so far as may be practicable, in such a manner and in such a position as to admit of the contents of such ashpit being removed therefrom, and from the premises to which such ashpit may belong, without being carried through any dwelling-house or public building, or any building in which any person may be, or may be intended to be employed in any manufacture, trade or business.

86. Every person who shall construct an ashpit in connection with a building, shall construct such ashpit of impervious materials, as described for receptacles under privies.

He shall cause such ashpit to be properly roofed over and ventilated, and to be furnished with a suitable door, in such a position and so constructed and fitted as to admit of the convenient removal of the contents of such ashpit, and to admit of being securely closed and fastened for the effectual prevention of the escape of any of the contents of such ashpit.

87. A person who shall construct an ashpit in connection with a building shall not cause or suffer any part of such ashpit to communicate with any drain.

WATER SUPPLY.

Every tenement house should be provided with water. The taps should not be placed in such positions as might allow of foul air being sucked into the pipes during diminished water pressure in the latter.

No water from a water-closet cistern should be used for other than flushing purposes. Report all leaking taps and pipes.

DISINFECTION OF ROOMS, &c.

All bedding and clothing used by the patient, as well as carpets, curtains and other such soft materials contained in the rooms occupied, should be first removed from the house for conveyance to the Disinfecting Chamber. Sulphur should then be burned in each room, in the proportion of 1 lb. to every 1,000 cubic feet—all fireplaces, keyholes, crevices in doors and windows, having been first stopped up by having paper pasted over them. The room should be allowed to remain closed for three hours, or preferably for the rest of the day. All drains, ashbins, &c., at the rere of the house, should be treated with disinfecting fluid. On the following day the paper should be removed from the walls of the rooms, and conveyed to the Disinfecting Chamber, for the purpose of being burned there, and the walls should then be whitewashed with hot lime-wash. The furniture and flooring of the rooms should be well scoured with carbolic acid soap and hot water, and also the stairs of the house, hallways and passages.

BYELAWS

Relating to Houses and Parts of Houses Let in Lodgings, and Occupied by Members of more than One Family.

Every house or part of a house let in lodgings, or occupied by members of more than one family, shall be subject to the following regulations :—

1. That no greater number of persons shall occupy any room in any such house than can be accommodated with 300 cubic feet of space for each (for example, a room 10 feet high, 15 feet long, and 10 feet wide, contains 1,500 cubic feet of space, and may therefore accommodate five persons).

2 That said authority, or any of its officers, may enter and inspect any such houses, or any apartments or appurtenances thereof, without let or hindrance, between the hours of 10 a m. and 4 p.m., for the purpose of carrying into effect these regulations and the provisions of said Act, or in special cases at any other time, upon the signed requisition of the Chairman of the Public Health Committee, by vote of the Committee and not otherwise; and may inspect and measure the dimensions of each room. and affix on the door thereof a description of the cubic contents of such room, in a form to be provided by such authority, and any removal or defacement of such certificate shall be deemed a breach of these regulations.

3. That the owner of every such house shall have supplied thereto, and shall maintain a properly-constructed ashpit and privy, water-closet or earth closet, or privies or water-closets sufficient to accommodate the inhabitants thereof, and properly-trapped and ventilated house-drain communicating with the main sewer (if any within 100 feet from such house), and if no such main sewer, then with a proper cess-pool; and shall cause privies, water-closets, ashpits, cess-pools and house-drain, to be kept cleansed and in proper repair; and shall also provide for each such house a sufficient supply of pure water; and keep the roof, external walls, windows and chimneys of such house in reasonable repair, impervious to wet; and shall cause each window of such house to be made capable of being opened from the top or raised

from the bottom, or otherwise opened to the extent of the half of each sash, and shall cause the entrance and hall, basement story rooms, staircases and lobbies thereof, to be put and kept in good repair, and in a cleanly and ventilated state; and no room shall be let or used as a sleeping apartment unless it shall have at least one window; and all yards, halls, staircases, passages and rooms and cellars not papered or oil-painted, he shall cause to be lime-washed at least every six months; and shall cause the courts and court-yards of such houses to be paved with such materials and in such manner as the sanitary authority shall direct; within the provisions of this regulation the word "owner" shall mean the person or persons who, for the time being, shall be in receipt of the rents of the lodgers, or other occupiers of such premises.

4. That no occupant residing in any such house, nor any other person, shall throw from any window or other opening to or upon any roof, shed, yard, passage or street, any water, foul liquid, or other offensive matter or thing, or shall throw or drop same in or upon any common entrance, staircase, lobby, street or place other than that provided for the proper deposit thereof, and every occupant or other person shall so use any requisite in or appurtenant to any such house as not to injure or break, or render ineffective, or put same out of order.

5. That in the case of any infectious disease occurring in any house in which lodgers are received, it shall be the duty of the owner of such house to report same to the Public Health Committee, with a view to the disinfection of the premises, and to the removal to hospital, if necessary, of any person suffering from such disease.

6. Every person who shall offend against any of the foregoing byelaws shall be liable for every such offence to a penalty not exceeding five pounds, and in case of a continuing offence, to a further penalty not exceeding forty shillings for each day after written notice of the offence from the sanitary authority. Provided, nevertheless, that the Justices in Court before whom any complaint may be made, or any proceeding may be taken in respect of any such offence, may, if they think fit, adjudge the payment as a penalty of any sum not less than the full amount of the penalty imposed by this byelaw.

Inspection of Nightly Lodging-houses.

These should be inspected not only in the daytime, but occasionally at night. They should be kept in a cleanly state. The bedding and bed-clothes should be examined.

Cooking, eating and washing must not be carried on in the sleeping rooms. Nightly lodging-houses are governed by the following Byelaws :—

1. Every person keeping, or intending and desiring to keep, take, or open any lodging-house within the City of Dublin, and subject to the provisions of the "Public Health (Ireland) Act, 1878," shall, fourteen days at the least before such person shall take, keep, or open such lodging-house, and before lodgers shall be received or accommodated in such house, make application to the Public Health Committee of the Town Council of the said city, in writing, in the form or to the effect contained in the schedule to these byelaws annexed, and marked A.

2. Every person keeping, or who shall hereafter keep, any registered lodging-house within the said city, shall, on or between the 1st and 8th days of January in each year, give notice in writing thereof to the said Public Health Committee, in the form or to the effect contained in the schedule marked B, to these byelaws annexed.

3. Every person keeping, or having made application to keep or register, such lodging-house, shall within four days after the delivery at such lodging-house of a notice that the said Council have registered such lodging-house, and have fixed the number of lodgers to be received in such house, and to be accommodated in each room of such house, apply at the office of the Inspector of Nuisances, or other officer authorized in that behalf by the said Council, for at least as many tickets in the form in the schedule hereto annexed, marked C, as there are rooms in such lodging-house ; and, on the same being delivered to him or her, shall sign an acknowledgment of the receipt thereof, and shall forthwith place, affix, and keep, and continue one of such tickets in such part of each room in such lodging-house as shall be ordered and directed by the Inspector of Nuisances, or other officer or officers authorized in that behalf by the said Council ; and shall not afterwards remove or deface such ticket or tickets, or permit, or allow them, or any of them, to be removed or defaced, unless by order of the said Council, or a Committee thereof, in that behalf duly authorized ; and shall from time to time produce such ticket upon the order or request of the Inspector of Nuisances, or other authorized officer or officers of the said Council, and deliver the same to such Inspector or other authorized officer or officers, on demand, for the purpose of having such alterations made therein as the said Council or Committee shall from time to time order or direct.

4. Every keeper of a registered lodging-house within the sai city shall permit and suffer the Inspector of Nuisances, or an officer or officers properly and specially authorized by the sai Council, to at any time enter such lodging-house, and ever registered room thereof, and to examine and inquire into th manner in which such lodging-house is kept, and ascertain whethe or not the rules, byelaws, and directions of the said Council are observed therein ; and shall afford to every such Inspector, or officer, assistance and facility in making such inquiry and examination.

5. A keeper of a common lodging-house shall not, except in such cases as are hereinafter specified, cause or suffer any person of the male sex above the age of *ten years* to use or occupy any room which may be used or occupied as a sleeping apartment by persons of the female sex.

Such keeper shall not, except in such cases as are hereinafter specified, cause or suffer any person of the female sex to use or occupy any room which may be used or occupied as a sleeping apartment by persons of the male sex above the age of *ten years.*

Provided that this byelaw shall not be taken to prohibit the use and occupation by a husband and wife of any room which may not be used or occupied by any other person of either sex above the age of *ten years.*

6. Every keeper of a common lodging-house shall cause every room therein, which may be appointed for use and occupation as a sleeping apartment by two or more married couples, to be so furnished or fitted that every bed, when in use and occupation, shall be effectually screened from the view of any occupant of any other bed, by means of a partition of wood or other solid material, which shall be constructed and fixed or placed so as to allow adequate means of access to the bed which such partition is intended to screen, and so as to extend upwards throughout the whole length and breadth of such bed to a sufficient height above such bed, and downwards to a distance of not more than *six inches* above the level of the floor.

7. Every keeper of a registered lodging-house shall cause the windows in each room in such house to be made to open to at least one-third their extent, and shall cause such windows to be well and sufficiently glazed, and shall cause the windows in each and every room in such house to be and continue open to at least one-third their extent, from the hour of nine o'clock to the hour of ten o'clock in the forenoon of each and every day, unless prevented by wet and tempestuous weather (in which case the windows shall be so opened for one hour at some other period of the day, weather permitting), or by the illness of any inmate of

such room, and shall cause a perforated zinc plate, or other means of ventilation, to be fixed in at least one window of or other place in each room, to the satisfaction of the Inspector of Nuisances, or other authorized officer or officers of the said Council; and shall cause the floor of each and every room in such lodging-house, and all the stairs and passages thereof, to be well and sufficiently swept at least once in each day before the hour of ten o'clock in the forenoon; and shall cause the floor of each and every room in such lodging-house, and all stairs and passages thereof, to be well and sufficiently washed on Friday, or on such other day as may be specified by the sanitary authority, in each and every week, before the hour of twelve o'clock at noon; and shall cause such lodging-house to be thoroughly cleansed, and the blankets, rugs, bedclothes, and covers used in such lodging-house to be kept and preserved clean, and to be thoroughly cleansed, and scoured at least three times in each and every year—that is to say, at least once during the first week of each of the several months of April, August, and December; and shall cause the linen of cotton sheets, and covers of bolsters and pillows, to be washed at least once during each week; and shall cause the walls and ceilings of every room, and of the stairs and passages thereof, to be well and sufficiently lime-washed in the first week of each of the months of April and October in every year, and shall, if he fail to cause the walls and ceilings to be so lime-washed, be liable to a penalty not exceeding *forty shillings*.

8. Every keeper of a common lodging-house, immediately after he shall have been informed, or shall have ascertained, that any lodger in such house is ill of any infectious disease, shall adopt all such precautions as may be necessary to prevent the spread of such infectious disease.

Such keeper shall not, at any time while such lodger is suffering from such infectious disease, cause or allow any other person, except the husband or wife or any other relative of such lodger, or except a person voluntarily in attendance on such lodger, to use or occupy the same room as such lodger.

Where, in pursuance of the statutory provision in that behalf, the sanitary authority may order the removal of such lodger to a hospital or other place for the reception of the sick, such keeper, on being informed of such order, shall forthwith take all such steps as may be requisite on his part to secure the safe and prompt removal of such lodger, in compliance with the order of the sanitary authority, and shall, in and about such removal adopt all such precautions as, in accordance with any instructions which he may receive from the Inspector of Nuisances, or other authorized officer, may be most suitable for the circumstances of the case. Where, in consequence of the illness of such lodger, there may be reasonable grounds for apprehending the spread of infection through the admission of lodgers to any room or rooms in such house, or through the admission to such room or rooms of the maximum number of lodgers authorized to be received therein, such keeper, after being furnished with the necessary instructions from the Inspector of Nuisances, or other authorized officer, and until the grounds for apprehending the spread of infection shall have been removed, shall cease to receive any lodger in such room or rooms, or shall receive therein such number of lodgers, being less than the maximum number, as the exigencies of the case may require

Such keeper shall, immediately after the death, removal or recovery of any lodger who may have been ill of any infectious disease, give written notice thereof to the Inspector of Nuisances, or other authorized officer, and shall, as soon as conveniently may be, cause every part of the room which may have been occupied by such lodger to be thoroughly cleansed and disinfected, and shall also cause every article in such room which may be liable to retain infection, to be in like manner cleansed and disinfected, unless the Sanitary Authority shall have ordered the same to be destroyed.

He shall comply with all instructions of the Inspector of Nuisances, or other authorized officer, as to the proper cleansing and disinfection of the room and articles.

When the same shall have been thoroughly cleansed and disinfected in accordance with such instructions, he shall give written notice thereof to the Inspector of Nuisances, or other authorized officer; and until two days from the giving of such notice shall have elapsed, and unless and until, by such cleansing and disinfection, the necessary precautions for preventing the spread of disease shall have been duly taken, such keeper shall not cause or suffer any other lodger to be received into the room which, in the case hereinbefore specified, may have been exposed to infection.

9. Every keeper of a registered lodging-house shall, within forty-eight hours after service of the notice, reduce the number of lodgers in such house, or shall cease to receive lodgers therein in compliance with and upon notice in writing to such effect from the said Council, or from any Committee thereof in that behalf empowered, being duly served at such house, or posted on the door thereof.

10. Every registered lodging-house shall, within one week from the death of the registered lodging-house keeper, cease to be a registered lodging-house for the reception of lodgers.

Provided, however, that the widow or any member of the family of the deceased lodging-house keeper may keep the house as a common lodging-house for not more than four weeks after his death, without being registered as the keeper thereof.

11. Every keeper of a registered lodging-house shall, upon service on the Council or Inspector of Nuisances of a notice in the form or to the effect in the schedule hereunto annexed, and marked D, cease to be the keeper of such a lodging-house, or responsible therefor, and such house shall thereupon cease to be a registered lodging-house.

12. Every keeper of a registered lodging-house shall provide a good and sufficient accommodation for washing, and a good and sufficient supply of pure water and proper cisterns, or such other vessels to contain same, for the use of the lodgers in such house.

13. Every keeper of a registered lodging-house shall provide for the use of the lodgers and the inmates of such house, such a fit and proper water-closet, earth-closet, or privy to the same, in such situation, and with such proper door and covering to such privy, and also such fit and sufficient ashpit, and in such situation as the Inspector of Nuisances, or other authorized officer or officers of the said Council, shall direct; and shall keep the water-closet or earth-closet, privy and ashpit belonging to every registered lodging-house in good and sufficient repair; and shall keep every such privy and ashpit well and sufficiently cleansed and emptied to the satisfaction of such inspector, officer, or officers.

14. No horse, ass, mule, horned cattle, sheep, swine, or poultry shall be kept or fed in any registered lodging-house.

15. Every person who shall offend against any of the foregoing byelaws shall be liable for every such offence to a penalty not exceeding five pounds, and in the case of a continuing offence, to a further penalty not exceeding ten shillings for each day, after written notice of the offence from the said Council, or from any Committee thereof, in that behalf empowered. Provided, nevertheless, that the Justices in Court before whom any complaint may be made, or any proceedings may be taken in respect of any such offence, may, if they think fit, adjudge the payment as a penalty of any sum less than the full amount of the penalty imposed by this byelaw.

Keeping of Animals.

No swine are permitted to be kept within 50 feet of a dwelling. If they are not kept in a cleanly state, they are a nuisance under any circumstances. The floor of the sty should be concreted and well drained, and the manure should be frequently removed.

Stables should be kept in a cleanly state, and no accumulations of manure permitted in them, or in the yard, if any, attached to them. Sunken dung-pits should not be permitted under any circumstances. Stables should be properly drained, and their floors should be such as not to permit of soakage into the soil.

The following are the Byelaws of the Corporation in reference to the keeping of animals :—

1. The term "cattle-shed" shall mean any cattle-shed, cow-house, byre, or pig-sty, used for the keeping and feeding of any animal.

2. Every cattle-shed shall be so constructed as to be well lighted and well ventilated.

3. Every cattle-shed shall have a proper and adequate supply of water.

4. The floor of every cattle-shed shall be properly asphalted, flagged or bricked, or otherwise surfaced and drained so as to allow of the maintenance of necessary cleanliness, and so as to prevent such floor from becoming saturated with the excretions of the animals kept on the premises.

5. Every shed for horned-cattle shall be so constructed and arranged as to give to each animal kept therein a standing-place of not less than 7 by 3 superficial feet, exclusive of channel, passage, crib, trough and manger.

6. Every such shed which is not open throughout the entire length of one of its two longer sides shall be so constructed and arranged as to give to each animal kept within such building a cubic space of not less than 400 cubic feet.

7. All pits or places where manure is accumulated, kept, or allowed to remain on dairy or cow-keeping premises, shall be so formed and situated as not to render any place where animals are kept, or the air in or about it, unhealthy or offensive; and should the premises not admit of the manure being so kept, it shall not be kept or allowed to accumulate or remain thereon for more than two days at a time.

8. Where grains are used for feeding, there must be a water-tight grains-pit, properly constructed, drained and ventilated.

9. Every cattle-shed shall be on or above the ground-level, and shall in no case be allowed to be in proximity to any place used for the purpose of receiving or keeping diseased animals, living or dead.

10. Every cattle-shed shall be swept and thoroughly cleansed at least twice every day; and the walls thereof, outside and inside, shall be limewashed twice in each year, viz., in the months of June and November.

11. Every person carrying on the business of a dairyman or cow-keeper, or having or keeping a place or premises for the purpose of keeping cows or oxen, shall set forth a description of the premises, and where they are situated, with the name and address, in full, of the owner or occupier, and also of the number of animals kept or intended to be kept therein, and shall transmit same to the executive officer of the Sanitary Authority, on the 1st day of January in each year, or within fourteen days thereafter.

12. Every officer of the Sanitary Authority shall have power to enter such premises for the purpose of ascertaining their state and the state of the animals therein, at all reasonable hours, or at any time that business is being carried on therein.

13. Every person who shall offend against any of the foregoing byelaws shall be liable for every such offence to a penalty not exceeding forty shillings and in the case of a continuing offence, to a further penalty not exceeding forty shillings for each day after written notice of the offence from the Sanitary Authority shall have been served upon such person. Provided nevertheless that the Justices in Court before whom any complaint may be made, or any proceedings may be taken in respect of any such offence, may, if they think fit, adjudge the payment as a penalty of any sum less than the full amount of the penalty imposed by this byelaw.

NUISANCES.

These are defined by the 107th Section of the Public Health Act, 1878, as follows:—

NUISANCES.

107. For the purposes of this Act—

1. Any premises in such a state as to be a nuisance or injurious to health:

2. Any pool, ditch, gutter, watercourse, privy, urinal, cesspool, drain or ashpit, so foul or in such a state as to be a nuisance or injurious to health:

3. Any animal so kept as to be a nuisance or injurious to health.

4. Any accumulation of deposit which is a nuisance or injurious to health.

5. Any house or part of a house so overcrowded as to be dangerous or injurious to the health of the inmates, whether or not members of the same family.

6. Any factory, workshop, or workplace not kept in a cleanly state, or not ventilated in such a manner as to render harmless, as far as practicable, any gases, vapours, dust or other impurities generated in the course of the work carried on therein that are a nuisance or injurious to health, or so over-crowded while work is carried on as to be dangerous or injurious to the health of those employed therein.

7. Any fireplace or furnace which does not, as far as practicable, consume the smoke arising from the combustible used therein, and which is used for working engines by steam, or in any mill, factory, dye-house, brewery, bakehouse, or gas-work, or in any manufacturing or trade process whatsoever ; and

Any chimney (not being the chimney of a private dwelling-house) sending forth black smoke in such quantity as to be a nuisance, shall be deemed to be nuisances liable to be dealt with summarily in manner provided by this Act,

Provided—

First, that a penalty shall not be imposed on any person in respect of any accumulation or deposit necessary for the effectual carrying on any business or manufacture if it be proved to the satisfaction of the court that the accumulation or deposit has not been kept longer than is necessary for the purposes of the business or manufacture, and that the best available means have been taken for preventing injury thereby to the public health.

Secondly, that where a person is summoned before any court in respect of a nuisance arising from a fireplace or furnace which does not consume the smoke arising from the combustible used in such fireplace or furnace, the court shall hold that no nuisance is created within the meaning of this Act, and dismiss the complaint, if it is satisfied that such fireplace or furnace is constructed in such manner as to consume, as far as practicable, having regard to the nature of the manufacture or trade, all smoke arising therefrom, and that such fireplace or furnace has been carefully attended to by the person having the charge thereof.

This section shall be deemed to be an enactment substituted for the provisions of section nineteen of the Public Health Act, 1866, within the meaning of section one hundred and six of the Factory and Workshop Act, 1878.

RETURN OF THE NUMBER OF NEW BUILDINGS ERECTED AND COMPLETED IN THE SOUTH SIDE OF THE CITY FOR THE YEAR ENDED 31ST DECEMBER, 1893.

Name of Street	No. of Houses	No. of Stories in each House	No. of Rooms in each House	Area built on in Sup. Feet	Area unbuilt on in Sup. Feet	W. C.'s or Petits
Bass-place	3	2	4	1344	896	W.C.
Boyne-street	7	2	4	2366	1120	,,
Carlingford-parade	3	2	4	1260	675	,,
Chamber-street	2	2	4	640	480	,,
Charlemont-row	1	2	2	160	125	,,
Clarence-place	2	2	4	375	320	,,
City-quay	1	3	9	1250	224	,,
Cook-street	1	2	4	522	648	,,
Copper-alley	1	2	5	4896	3250	,,
Cork-street	3	2	6	2139	480	,,
Do.	2	2	5	1306	1314	,,
Do.	1	2	6	3519	5600	,,
Ebenezer-terrace	3	1	4	2340	2286	,,
Eglinton-terrace	2	3	7	1320	1520	,,
East Essex-street	1	3	6	590	160	,,
Fownes's-street	1	4	10	595	122	,,
Harman-street	13	1	2	5668	2080	,,
Do.	14	2	3	3240	2940	,,
Hamilton-street	8	2	4	4536	6944	,,
Do.	1	2	6	732	987	,,
James's-street	1	1	5	2640	2160	,,
Lulleymore-terrace	1	1	5	640	1020	,,
Nassau-place	1	2	4	1188	—	,,
Parliament-street	1	4	11	1527	36	,,
Power's-court	10	2	3	3760	5720	,,
Rainsford-street	1	3	3	4674	—	—
Rialto-street	1	2	5	1044	2340	W.C.
Sandwith-street	4	2	4	1352	640	,,
Sandwith-lane	5	1	2	1120	800	,,
Sir John Rogerson's-quay	1	1	1	14664	—	—
South Circular-road	5	2	5	4310	6250	,,
Do.	1	5	25	6768	3690	,,
Do.	2	2	6	1534	1472	,,
Tara-street	1	2	5	1250	—	,,
Do.	1	2	6	1500	—	,,
Townsend-street	1	5	8	320	150	,,
Upper Stephen-street	1	4	10	3290	1760	,,
Warrenmount	1	3	3	5152	—	—
Westmoreland-street	1	6	12	852	—	,,
Total	110					

RETURN OF THE NUMBER OF NEW BUILDINGS ERECTED AND COMPLETED IN THE NORTH SIDE OF THE CITY, FOR THE YEAR ENDING 31ST DECEMBER, 1893.

Name of Streets	Number of New Houses	No. of Stories in each House	No. of Rooms in each House	Area built on Sup. Feet	Area unbuilt on Sup. Feet	Petit or W.C.
Arklow-street ...	44	1	3	18304	10880	W.C.
Ashford-street ...	39	1	3	16224	10530	,,
Aughrim-street ...	4	2	6	2912	1456	,,
Belvidere-road ...	1	3	7	660	1460	,,
Blackhall-place ...	1	1	2	462	230	,,
Cabra ...	4	2	8	2900	4640	,,
Church-street ...	1	3	13	1740	1026	,,
Commons-street ...	1	3	36	2140	647	,,
Deverell-place ...	1	1	1	960	—	,,
Dorset-street (Upper) ...	1	4	9	1008	—	,,
Esplanade, Royal Barracks	2	2	6	3643	11970	,,
Gloucester-street ...	1	3	9	667	340	,,
Green-street (Little) ..	1	2	2	1008	—	,,
Halston-street ...	1	3	3	935	—	,,
Kirwan-street ...	2	2	6	1100	540	,,
Infirmary-road ...	1	1	2	460	290	,,
Market-street ...	1	1	1	854	160	,,
Mary's-lane ...	1	3	8	2050	295	,,
Do. ..	1	2	4	2892	1774	,,
Munster-street ...	2	2	4	1444	1800	,,
North Circular-road ...	2	3	12	2804	2912	,,
Do. ...	10	3	9	10440	9600	,,
Do. ...	2	2	7	1432	1470	,,
Do. ...	1	2	6	672	160	,,
Do. ...	1	1	4	2252	416	,,
North Wall ...	1	3	18	2600	500	,,
Nottingham-street ...	2	2	4	1040	2320	,,
Oxmantown-road ...	13	2	5	3660	2400	,,
Prussia-street ...	1	2	5	403	225	,,
St. Ignatius'-avenue ...	3	2	4	1352	840	,,
St. Ignatius'-road ...	4	2	4	1146	1776	,,
St. Joseph's-road ...	4	2	5	1612	900	,,
Sheriff-street ...	1	1	4	10548	460	,,
Strand-street (Great) ...	1	3	3	2050	—	,,
Summerhill ...	1	2	11	1521	2400	,,
Do. ...	1	2	4	460	390	,,
Talbot-place ...	1	1	1	2016	2300	,,
TOTAL ...	159					

List of Houses Detenanted and Closed during the Year 1893.

Bedford-street, Nos. 1 to 8
Bell's-lane, No. 1
Blackhall-street, No. 22
Brown-street, North, Nos. 1 and 2
Bride-street, Nos. 27 and 28
Church-street, No. 114
Constitution-hill, No. 29
Cumberland-street, North, Nos. 29 and 30
Dorset-street, Lower, No. 80
Dunphy's-lane, Nos. 1, 2 and 3
Francis-street, Nos. 68 and 69
Grattan-cottages, Nos. 1 to 16
Liffey-street, Upper, No. 1
Mabbot-street, No. 22
Myler's-alley, Nos. 1, 2, 3, 10, 18, 19 and 20
Poolbeg-street, Nos. 39, 40 and 41
Reilly's-cottages, No. 5
Stoneybatter, No. 24 and 4 cottages at rere
Strand-street, Great, No. 58
Toole's-court, Nos. 1 to 5
Usher-street, Nos. 4, 13 and 10

Total number of houses—67.

Number of houses closed from 31st August, 1879, to 31st December, 1893—2,790.

LIST OF KITCHEN DWELLINGS UNFIT FOR HUMAN HABITATION CLOSED DURING THE YEAR 1893.

No. of House	Street	No. of Kitchens
21	Benburb-street	1
48	Charlemont-street	1
28	Gloucester-street, Upper	1
1	Linenhall-street	1
12	Pitt-street	1
13	Do.	1
36	Mercer-street, Upper	2
48	Rutland-street, Lower	1
49	Do.	1
56	Summerhill	1
	Total,	11

Number of Cellar Dwellings closed from 31st August, 1879, to 31st December, 1893—816.

LIST OF ROOMS IN OTHER HOUSES UNFIT FOR HUMAN HABITATION CLOSED DURING THE YEAR 1893.

No. of House	Street	No. of Rooms
5	Baggot-court	1
12	Cumberland-street, North	1
12	Tyrone-street, Upper	1
182	Townsend-street	6
	Total,	9

RETURN OF SANITARY OPERATIONS FOR THE YEAR ENDED 31ST DECEMBER, 1893.

Inspections of Tenement Houses	58162
Do. Tenement Rooms	241113
Do. Nightly Lodging Houses	912
Do. Bakeries	169
Do. Slaughter-houses	1271
Inspections of Dairy Yards	4342
House Drains constructed	306
Do. repaired and cleansed	3166
Water-closets constructed	228
Do. cleansed	4488
Do. repaired	3282
Dust-bins supplied	251
Dwellings repaired	6223
Dwellings cleansed	7636
Dwellings condemned and closed, being unfit for human habitation	67
Kitchen Dwellings condemned and closed	11
Rooms do. do.	9
Dwellings reported to the City Engineer as being dangerous	120
Yards and External Premises cleansed	1734
Lanes and Alleys cleansed by private parties	230
Accumulations of Manure removed	780
Animals removed from Dwellings	103
Swine removed from Yards where kept offensively	660
Miscellaneous Nuisances abated	3744
Cases where Water was supplied to Tenement Houses,	36
Sanitary Defects discovered	33515
Sanitary Defects remedied	33375
Notices to abate Nuisances served	11865
Prosecutions for Ordinary Sanitary Offences	2248
Convictions do. do.	2109
Do. for selling or being in possession of Unsound Meat	6

Convictions for selling adulterated Food	126
Do. for refusing to sell Sample of Milk for analysis	3
Do. Breaches of Margarine Act	50
Do. Breaches of Building Bye-laws	Nil
Do. Breaches of Bye-laws *re* Cleansing of Footpaths	37
Total Number of Convictions	2331
Reports received from Medical Sanitary Officers	987
Patients removed by Hospital Cabs	280
Removals for Disinfection by Vans	1843
Compulsory immediate interments of Bodies of Persons who died from Infective Diseases	8
Compulsory removals of Patients suffering from Infective Diseases to Hospital	34
Disinfecting Chamber used by Persons	1074
Number of Articles Disinfected	15918
Infected Mattresses and Beds burned, their owners compensated	649
Infected Dwellings inspected and cleansed	977
Do. Chemically disinfected	868

FINES AND COSTS IMPOSED DURING THE YEAR 1893.

	£	s.	d.
Fines for Sanitary Offences	126	5	6
Fines for Adulteration of Food	228	12	0
Costs *re* ditto	0	10	6
Fines for Breaches of Margarine Act	220	0	0
Costs *re* ditto	7	1	6
Fines for refusing Sample for Analysis	11	0	0
Fines for selling or being in possession of Unsound Food	37	0	0
Fines for Breaches of Contagious Diseases (Animals) Acts	7	15	0
Fines for Assaulting Food Inspector	1	0	0
Fines for Breaches of Bye-laws *re* Cleansing of Footways	2	5	6
	£641	10	0

Amount Paid.

	£	s.	d.
Fines for Sanitary Offences	79	8	0
Fines for Adulteration of Food	214	4	6
Costs *re* ditto	0	10	6
Fines for Breaches of Margarine Act ...	198	0	0
Costs *re* ditto	7	1	6
Fines for refusing Samples for Analysis ...	11	0	0
Fines for selling or being in possession of Unsound Food	37	0	0
One-third Fines for Breaches of Contagious Diseases (Animals) Act	2	11	8
Fines for Breaches of Bye-laws *re* Cleansing of Footways	1	0	9
	£550	16	11

Amount Unpaid and Remitted.

Fines for Breaches of Sanitary Law, in respect of which Distress or Committal Warrants have been issued	8	10	0
Sanitary Fines remitted by Lord Lieutenant ...	1	0	0
Do. by Recorder ...	20	0	0
Do. by Magistrates ...	4	7	6
Catherine Griffiths, Richard Ennis, and Margaret Green were imprisoned for non-payment of Sanitary Fines, amounting to	13	0	0
Fines for Adulteration of Food remitted by Lord Lieutenant	2	0	0
Fines for Adulteration of Food by Recorder ...	8	7	6
Fines for Breaches of Margarine Act by Lord Lieutenant	3	0	0
Dismissed on account of Wrong Name in Summons	4	0	0
Anne Hayden was imprisoned for non-payment of Fine *re* Margarine...	5	0	0
Carried forward,	£69	5	0

	£	s.	d.
Brought forward,	69	5	0
Fines for Breaches of Margarine Act, in respect of which Distress or Committal Warrants have been issued	14	0	0
Two-third Fines *re* Contagious Diseases (Animals) Act retained by Authorities	5	3	4
Moiety of Footway Fines retained by Police Authorities	1	0	9
Footway Fines remitted by Magistrate ...	0	4	0
Assault Fines retained by Police Authorities ...	1	0	0
	£90	13	1

SUMMARY.

Total Amount imposed				641	10	0
Amount paid	£550	16	11			
Unpaid and remitted ...	90	13	1			
				£641	10	0

List of Owners of Houses who were Fined for the Insanitary State of their Premises during the Year 1893, and from whom the Penalties imposed have been Recovered.

NAME	Premises Complained of	Amount		
		£	s.	d.
Armstrong, James	3 to 5 Pinchgut-lane	5	0	0
Callaghan, Francis	12 and 13 Ardee-street	2	0	0
Canning, John	1 and 2 Grenville-street	1	0	0
Chamney, Joseph	4 and 5 Mark-street	0	10	0
Clancy, Mary	13 Benburb-street	1	0	0
Do.	do.	0	10	0
Clowry, John	26 Golden-lane	0	5	0
Conroy, Charles	1 Bell's-lane	0	10	0
Cullen, Mary	17 Sandwith-lane	0	10	0
Curry, James	3 Killarney-parade	2	0	0
Dagg, John	1 and 2 Brown-street	0	10	0
Duignam, John	148 and 149 Church-street			
Duffy, James	Duffy's-cottages	0	5	0
Eastwood, George	3, 4 and 5 Ayre's-court			
Eastwood, Samuel	12 Upper Tyrone-street	1	0	0
Ebbs, John	29 Upper Ormond-quay	2	0	0
Farrell, Loughlin	12 Meath-street	0	10	0
Do.	14 do.	0	10	0
Farrell, Joseph	19 Lower Erne-street	0	10	0
Faulkner, Patrick	5 Faulkner's-cottages	0	10	0
Grant, Sarah	77 Charlemont-street	0	10	0
Harte, Patrick	1 to 10 Morgan-place	1	0	0
Hawkshaw, Ellen	82 Francis-street	0	10	0
Do.	86 do.	0	10	0
Heffernan, Michael	8 and 9 Cross-lane	1	0	0
Holmes, John	107 Bride-street	0	10	0
Holmes, Mary	61 and 62 Marlborough-street	2	0	0
Hughes, Thomas	2 to 5 Henrietta Buildings	2	0	0
Lavin, Sarah	76 Lower Clanbrassil-street	0	10	0
Do.	do.	1	0	0
Leech, Anne	12 Cole's-lane	0	5	0
Lynam, James	4 Cross Kevin-street	0	10	0
Lynam, Patrick	28 Upper Mercer-street	1	0	0
M'Carthy, T. D.	29 Greenville-terrace	0	10	0
M'Carthy, Patrick	13 and 14 Usher-street	1	0	0
M'Cormick, David	4 Lundy's-court			
M'Gowan, Catherine	4 Brabazon-row	1	0	0
M'Neight, H. G.	4 Usher-street	2	0	0
M'Nally, John	125 Great Britain-street	0	10	0
M'Mahon, Joseph	76, 77 and 78 Coombe	1	0	0
Morgan, Edward	1 and 2 Hackett's-court	0	10	0
Mulholland, Mary E.	7, 8 and 9 M'Guinness's-place	1	0	0
Mullen, Matthew	22 Meath-street	2	10	6
Do.	do.	3	0	0
Murray, Anne	Lodging-house, 8 Ashe-street	0	10	0

NAM	Premises Complained of	Amount		
		£	s.	d.
Nelson, Joseph ...	149½ and 150 Thomas-street ...	1	0	0
Do. ...	149 do. ...	0	10	0
Do. ...	149 do. ...	1	0	0
Nolan, Elizabeth ...	14 Leeson-lane ...	2	0	0
O'Brien, Mary ...	20 Charlemont-street ...	0	10	0
O'Brien, Denis ...	Lodging-house, 173 Church-street ...	0	10	0
O'Kelly, George ...	24 Mary-street ...	2	0	0
O'Neill, John ...	29 Charlemont-street ...	0	10	0
O'Reilly, James ...	124 Summer-hill and Cottages at rere ...	2	0	0
Do. ...	8 Eccles-street ...	1	0	0
Do. ...	115 and 116 Church-street ...	5	0	0
Plunkett, E. ...	9 Gordon's-place ...	1	0	0
Power, David ...	18 Upper Bridge-street ...	0	7	6
Rabbit, Anne ...	11, 12, 13 and 14 Abercorn-road ...	0	10	0
Redmond, Patrick ...	22 Windsor-terrace ...	0	10	0
Reilly, James ...	114 Church-street ...	1	0	0
Regan, Jane ...	Lodging-house, 15A Bride-street ...	1	0	0
Roche, John ...	138 Francis-street ...	2	0	0
Sherlock, Anne ...	23 and 24 Foster-terrace ...	1	0	0
Sullivan, Timothy ...	20 and 21 Hendrick-street ...	2	0	0
Do. ...	124 and 125 North King-street ...	1	0	0
Do. ...	do. ...	1	0	0
Do. ...	do.	5	0	0
Swain, Michael ...	Lodging-house, 160 Church-street ...	0	5	0
Taylor, Henry	13 Upper Tyrone-street ...	2	0	0
Thompson, Mary A. ...	3 Lower Kevin-street ...			
Do. ...	do. ...	0	10	0
		79	8	0

During the Year 1893 the following Persons were Fined under the Provisions of the Contagious Diseases (Animals) Acts, 1873-1886.

Name	Place	Fine		
		£	s.	d.
Askin, Catherine ...	Rath-row ...	1	0	0
Carroll, Norah ...	42 Moss-street ...	0	10	0
Cullen, James ...	Mahony's-lane .	1	0	0
Dwyer, Margaret ...	7 Poolbeg-street ..	0	5	0
Farrell, Mary A. ...	10 Redmond's-hill ...	1	0	0
Gallagher, Charles ...	Boyne-lane ...	2	0	0
Kavanagh, Patrick ...	Brickfield-lane ...	1	0	0
Lennon, Patrick ...	Gannon's-lane, Charlemont-st.	1	0	0
		£7	15	0

SLAUGHTER-HOUSES.

The custody of the Public Abattoir has been transferred from the Public Health to the Markets Committee.

The state of the private slaughter-houses throughout the city has engaged the attention of the Public Health Committee, and it has been resolved to make an attempt to have some of them, situated under the least favourable conditions, closed under the provisions of the Public Health Act, compensation to the owners being allowed, as provided by the Dublin Corporation Act of 1890. The following is a list of the slaughter-houses which have no yards attached to them, and it is in reference to these that action should be first taken.

Dimensions	Name of Occupier	Address	Situation of Slaughter-house	Slaughtering per Week	
				Cattle	Sheep
Feet					
14 × 18	M. Quinn	32 Moore-street	Market-place	3	20
10 × 12	A. Union	37 do	Sampson's-lane	—	10
15 × 10	Thomas A. Lawlor	36 Bolton-street	Henrietta-lane	6	25
10 × 16 Entrance by hall-door	Mrs. Hopkins	157 King-street, north	157 King-street, north	4	10
16 × 10	Richard Dawson	44 Amiens-street	53 Amiens-street	7	25
18 × 12	John Harding	169 Brunswick-street	7 Townsend-street	4	9
12 × 12	John M'Dermott	54 Talbot-street	Do.	5	12
14 × 12	James Tyrrell	32 Brunswick-street	Do.	3	10
20 × 10	Wm. M'Grath	83 Britain-street, great	Britain-place	4	10
12 × 10	D. Sullivan	35 Moore-street	Do.	8	30
18 × 12	R. Doyle & Son	31 Ormond-quay, upper	Beef-row	8	30
20 × 12	R. Nelson	5 Meath-street	Swan-alley	5	25
18 × 10	Mrs. Eliza Carroll	37 Thomas-street	Meath-market	8	35
20 × 10	M. O'Neill	9 Chatham-street	Clarendon-market	4	20
18 × 12	P. M'Donnell	8 & 9 Wexford-street	Liberty-lane	3	15
21 × 12	R. Thornton & Son	47 & 48 William-street	Digges'-lane	25	82
10 × 12	J. Jacob	81 Patrick-street	81 Patrick-street	—	20

THE CORPORATION BATHS AND WASH-HOUSES, TARA-STREET.

This branch of the Public Health Department has prospered during the year 1893. I find, on going over the returns and accounts furnished during the past nine years, that the number of visitors to the baths and to the wash-house exceed in 1893 by several thousands the numbers recorded in any previous year, and, as a natural corollary, the revenue has augmented in a corresponding degree.

One hundred and thirty thousand five hundred and eighty-eight individuals, men, women, and (a very considerable number of) children, passed through the turnstiles in the year 1893; and the revenue obtained from these bathers, received nearly altogether in very small sums, amounted to £1,383 1s. 8d., which is about twopence-halfpenny and a fraction of a farthing per head for each person.

The following tabular statement shows the number of persons who used the private reclining baths, the swimming baths, and the laundry, for a period extending over eight and a-half years (*i.e.*, from June, 1885, to December, 1893):—

Return of Visitors to the Baths and Wash-houses Tara-street, from the 1st *day of June,* 1885, *to the* 31st *day of December,* 1893.

Description of Accommodation	YEARS									Total of Visitors in each Department for the eight years and seven months
	1885	1886	1887	1888	1889	1890	1891	1892	1893	
Private Baths, Males	16,347	28,566	31,377	30,671	35,186	35,790	39,108	42,271	43,590	Total Male Bathers, 302,906
Private Baths, Females ...	1,943	4,654	6,284	3,479	6,478	6,580	8,194	8,251	9,533	Total Female Bathers, 55,396
Swimming Baths, all Male ...	...	44,227	67,259	23,449	45,392	56,113	55,822	47,835	63,284	Total Swimmers, 403,381
Washers ...	5,270	12,446	13,342	12,855	13,455	15,410	Closed 3 months 10,128	14,643	14,181	Total Washers, 111,733
Total of Visitors for each year ...	23,560	89,893	118,262	70,457	100,511	113,893	113,252	113,000	130,588	Grand Total of Visitors, 873,416
Total of Receipts each year ...	£211 9 8	£969 9 7	£1251 9 11	£801 8 7	£1149 8 1	£1143 13 3	£1193 9 9	£1203 9 4	£1383 1 8	Grand Total of Receipts, £9,306 19 10

The figures for the year 1888 show a marked falling-off in every department of the establishment as compared with the returns for the preceding year. The number of female bathers was about one-half of that in 1887, and 1,165 less than in 1886, whilst the male private bathers showed a decrease of over 706 as compared with 1887. These reductions were due to extensive structural alterations being carried on during the greater part of the year.

Additional private reclining baths (seven first-class and four second-class) were erected during the year of 1888.

While the alterations were proceeding, the male bathers were accommodated in that part of the premises subsequently set apart for the exclusive use of females. This accounts for the comparatively small number of the female bathers in 1888.

The enormous decrease (*i.e.*, 13,810) in the number of persons using the swimming baths was due to the fact that the swimming basins were in course of reconstruction. Improved sewer-pipes were laid down, and the floor of the baths raised, so as to allow a maximum depth of five feet six inches. Prior to this alteration the swimming baths were, owing to their excessive depth (18 in. below the level of the sewers), subject to pollution from sewage. The swimming baths' returns fluctuate considerably, the demands upon them depending, as I have remarked in one of my former annual reports, entirely upon climatic conditions.

In 1887, the swimming baths being kept open during the entire year, the visitors numbered 67,259; for 1888 they numbered 23,449; in 1889, 45,392; in 1890, 56,113; in 1891, 55,822; in 1892, 47,835; and in 1893, 63,284. Were it not that the Public Health Committee, acceding to the request of the Borough Surveyor, closed the swimming baths in the first week of September, during the water famine, two months before the proper time, more than seventy thousand persons would have used the swimming baths.

Seven hundred and two members of swimming clubs visited the baths after the ordinary hours for closing the premises. The receipts from these clubs amounted to £6 3s., or at the rate of six shillings an hour. One thousand three hundred and ninety-two members of these clubs were admitted to the baths during the usual hours at the reduced price of twopence each. The following return shows the number of men and boys who used the swimming baths, and the amount received from each class, during the short season of 1893 :—

	Nos.	£	s.	d.	Remarks
6d. Men's Swimming ...	1,003	25	1	6	Visitors admitted from 6 to 11.55 a.m.
4d. Do. ...	7,844	130	14	8	Admitted during remainder of day
2d. Do. ...	21,031	175	5	2	
2d. (Club Members) ...	1,392	11	12	0	From Wesley College Schools ; Dr. Benson's Rathmines do.
3d. Boys' Swimming ..	4,083	51	0	9	
1d. Do. ...	27,049	112	14	1	Principally boys under 12 years of age
5s. Discount Swimming	84	1	15	0	1 dozen tickets, in book form, are sold for 5s.
1s. 6d. Do. ...	96	0	12	0	12 tickets, pinned together, are sold for 1s. 6d.
Clubs and Schools ...	702	6	3	0	Including members of "Boys' Brigade"
Total Visitors to Swimming Baths during the twelve months ...	63,284				Total Receipts from Swimming Baths for the year ... £514 18 2

As an illustration of the influence of weather conditions on the number of persons using the baths, I reproduce (minus the statistical comparisons) two consecutive weekly returns furnished by the Superintendent. The mean temperature of the week ended on the 19th August, 1893, was 66·6° F., and was no less than 9·7° above the average temperature for the corresponding week in the previous ten years. In the week ended 26th August, 1893, the mean temperature was 57·9° F., being the average temperature for that week in the previous ten years :—

Superintendent's Cash Account and Record of Tickets Sold for Week ending the 19th day of August, 1893.

Description of Bath	Progressive Numbers		No. of Tickets Sold	Receipts
	Last No. Sold to 12th Inst.	Last No. Sold to Date of Return		
				£ s. d.
6d. Men's Swimming	6,883	6,992	109	2 14 6
4d. Men's Swimming	7,249	8,017	768	12 16 0
2d. Men's Swimming	O. 9,712	P. 1,521	1,809	15 1 6
3d. Boys' Swimming	1,110	1,495	385	4 16 3
1d. Boys' Swimming	3,244	4,896	1,652	6 17 8
2d. Special Swimming	2,723	2,844	121	1 0 2
5s. Swimming Books	121	121	...	...
1s. 6d. Swimming Books	96	96	...	...
Swimming Clubs, 1 Co. "Boys' Brigade"	...	...	30	0 6 0
Total of Male Swimmers ...	...	...	4,874	£43 12 1
4d. Men's Shower	157	161	4	0 1 4
2d. Men's Shower	1,338	1,351	13	0 2 2
6d. Men's Warm...	666	1,152	486	12 3 0
2d. Men's Warm...	3,512	4,343	831	6 18 6
1d. Men's Cold	6,300	6,307	7	0 0 7
5s. Warm Bath Books	17	17	...	...
			1,341	£19 5 7
s. d. By 5 at 6d. ... 2 6 ,, 36 at 2d. ... 6 0 Total 41 8 6 Cr. Cancelled Tickets	...	...	41	£0 8 6
Net Total of Men's Reclining Baths ...	...	...	1,300	£18 17 1
4d. Women's Shower	414	417	3	0 1 0
2d. Women's Shower	134	136	2	0 0 4
6d. Women's Warm	3,648	3,661	13	0 6 6
2d. Women's Warm	9,593	9,954	361	3 0 2
1d. Women's Cold	3,298	1,310	12	0 1 0
Total of Women's Reclining Baths ...	...	...	391	£3 9 0
Total Bathers, Every Sex and Class...	...	...	6,565	£65 18 2
Wash-house	4,474	4,749	No. of Washers 275	2 6 11½
Drying Damp Clothes at night time for Mr. Trear, of Dame-street	...	...	...	4 15 0
EXTRA TOWELS SUPPLIED—			No. of Towels	
Male Department	1,515	1,552	37	0 1 6½
Female Department	1,362	1,404	42	0 1 9
Total of Visitors during the Week ...	...	...	6,840	
Total Receipts from every source during Week	...	...	...	£73 3 5
Working Expenses	...	...	...	£24 8 2

Superintendent's Cash Account and Record of Tickets Sold for Week ending the 26th day of August, 1893.

Description of Bath	Progressive Numbers		No. of Tickets Sold	Receipts
	Last No. Sold to 19th Inst.	Last No. Sold to Date of Return		
				£ s. d.
6d. Men's Swimming	6992	7064	72	1 16 0
4d. Men's Swimming	8017	8456	439	7 6 4
2d. Men's Swimming	1521	2556	1035	8 12 6
3d. Boys' Swimming	1495	1778	283	3 10 9
1d. Boys' Swimming	4896	6224	1328	5 10 8
2d. Special Swimming	2844	2913	69	0 11 6
5s. Swimming Books	121	121	..	..
1s. 6d. Swimming Books	96	96	..	..
Swimming Clubs—1 Co. "Boys' Brigade," 1 hour	..	..	28	0 6 0
Total of Male Swimmers ..	...	..	3254	£27 13 9
4d. Men's Shower	161	163	2	0 0 8
2d. Men's Shower	1351	1358	7	0 1 2
6d. Men's Warm	1152	1507	355	8 17 6
2d. Men's Warm	4343	4948	605	5 0 10
1d. Men's Cold	6307	6308	1	0 0 1
5s. Warm Bath Books	17	17	..	..
	..	..	970	£14 0 3
By at 6d. ,, at 2d. Total Cr. Cancelled Tickets	..	..	33	£0 7 6
Net Total of Men's Reclining Baths ..	..	..	837	£13 12 9
4d. Women's Shower	417	420	3	0 1 0
2d. Women's Shower	136	137	1	0 0 2
6d. Women's Warm	3661	3671	10	0 5 0
2d. Women's Warm	C. 9954	D. 197	243	2 0 6
1d. Women's Cold	3310	3318	8	0 0 8
Total of Women's Reclining Baths ..	..	..	265	£2 7 4
Total Bathers, every Sex and Class ..	..	..	4356	£43 13 10
Wash-house	4749	5044	No. of Washers 295	£2 10 5½
EXTRA TOWELS SUPPLIED—				
Male Department	1552	1574	22	£0 0 11
Female Department	1404	1432	28	0 1 2
Total of Visitors during the Week ..	..	..	4651	..
Total Receipts from every source during the Week	..	..	..	£46 6 4½
Working Expenses	..	..	..	£24 0 9

The demand for "private baths" is greatly on the increase, as is evidenced by the tabular statement (on page 125), shewing the number of individuals, male and female, who attended each of the years that the institution has been in existence.

In 1892—a year that exceeded all previous years in the number of persons applying for private reclining baths—the number was 50,522—8,251 women and 42,471 men. In 1893 the number rose to 53,123, being an increase of 1,319 males and of 1,282 females.

Although there are 37 private bath-rooms (in four of which there are shower-bath appliances), yet the number is too small to accommodate the demand on them on Saturdays, Sundays, and busy days in general. This is proved by the fact of the "ticket issuers" having to cancel 848 tickets sold during the summer months to persons who could not or would not wait for what is termed in the establishment "his turn on the gallery." These cancelled tickets represent a sum of £11 11s. (*i.e.*, 269 sixpenny and 579 twopenny tickets).

The Superintendent has been reporting to the Public Health Committee for some years past upon the inadequacy of the hot water supply to the "male baths;" and now (when this report is just going to the printers), steps are about to be taken to remedy the defects complained of. The tanks, which are much worn, will be replaced by better ones, and the want of sufficient hot water pressure will be obviated by a new system of supply, recommended by the City Architect.

The following tables refer exclusively to the reclining baths:—

PRIVATE MALE RECLINING BATHS.

Price	Designation	Numbers	Receipts			Remarks
			£	s.	d.	
6d.	Men's Warm Baths ...	17,241	431	0	6	
2d.	Men's Warm Baths ...	25,657	213	16	2	
4d.	Men's Shower Baths ...	97	1	12	4	
2d.	Men's Shower Baths ...	361	3	0	2	
1d.	Men's Cold Baths ...	182	0	15	2	
3d.	Boys' Special Warm do.	40	0	10	0	Residents of the Harding Institute admitted *pro tem* at half-price to first class Warm Baths, per order of Public Health Committee
5s.	Men's Discount do ...	12	0	5	0	
Total Male Reclining Baths ...		43,590	Total Receipts from do ... £650 19 4			

FEMALE DEPARTMENT.

PRIVATE RECLINING BATHS AND PUBLIC WASH-HOUSE.

Price	Designation	Numbers	Receipts			Remarks
			£	s.	d.	
6d.	Women's Warm Bath ...	498	12	9	0	
2d.	Women's Warm Bath ...	8,096	67	9	4	The highest return yet recorded.
4d.	Women's Shower Bath	39	0	13	0	
2d.	Women's Shower Bath	44	0	7	4	
1d.	Women's Cold Bath ...	856	3	11	4	Many of those 1d. visitors simply came to use the water-closet.
	Women using wash-house	14,181	127	0	1	
	2,738 extra Towels supplied, at ½d.	...	5	14	1	
Total Females visiting premises,		23,714	Total Receipts Female Dept., £217 4 2			

SUMMARY.

Numbers		Receipts £	s.	d.
63,284	Swimming Baths	514	18	2
43,590	Private (Male) Baths	650	19	4
9,533	Private (Female) Baths	84	10	0
14,181	Washers	127	0	1
	Extra Linen	5	14	1
Total Visitors for 1893 ... 130,588	Total Receipts for 1893 ...	£1,383	1	8

During the year an additional story has been added to the Superintendent's dwelling, which now consists of a drawing-room and dining-room, four bedrooms, kitchen and pantry. Formerly the accommodation was wholly inadequate for Mr. O'Brien's somewhat numerous family.

In addition to improving the dwelling space, the old sewers were examined by experts from the department of the Borough Surveyor, who found the soil pipes, &c., &c., in a defective condition.

The soil pipe leading from the water-closet in the female department of the baths and wash-houses, I noticed, was not properly jointed to the neck of the closet-pan, and so allowed the foul matter—solid and fluid—to escape into and be absorbed by the earth under the flooring of the offices and dwelling in Mr. O'Brien's occupation. In my opinion, this faulty sewer was responsible mainly for the intolerable stench pervading the premises.

Two medical gentlemen having certified that five of the Superintendent's children were suffering from gastric fever, and recommending their instant removal to more sanitary quarters, I brought the matter without delay before the Public Health Committee, who directed Mr. O'Brien to obtain apartments away from the baths and wash-houses. In his family's absence, the alterations were carried out, as referred to above, and new sewers, properly laid, trapped, and ventilated in the open, were also introduced.

Mr. O'Brien and family are now (April, 1894) back in their improved dwelling, and, so far, quite free from all feverish symptoms.

Return showing the Income and Expenditure on the Baths and Wash-houses for the Year ended 31st December, 1893.

INCOME	EXPENDITURE									
Tolls	Salaries and Wages	Fuel	Disinfectants, Soap, &c.	Repairs	Stationery	Gas	Insurance and Rates	Sundries	Proportion of Dividend on Stock	Total
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1386 1 2	662 7 2	278 2 3	15 5 3	73 4 5	29 5 3	73 15 4	57 14 2	430 14 1	347 16 9	1968 4 8

BENBURB-STREET CORPORATION ARTISANS' DWELLINGS AND NIGHTLY LODGING-HOUSES.

At the close of 1893 there were 137 tenements in occupation, and 7 unoccupied, viz.—One shop and apartments at 10s.; two dwellings of three rooms each at 4s. 9d.; one dwelling of two rooms at 3s. 3d.; two single-room dwellings at 2s.; and one at 1s. 9d. There were 485 persons in occupation, viz.—257 males and 228 females.

There were eight deaths during the year. Three from consumption, viz.—one man, aged 40, and two women, aged respectively 20 and 24 years; four infants, from three months to one year and ten months old, from convulsions; and one child, seven weeks old, from diarrhœa.

There were 23 births, two of which were twins, making a total of 25, viz.—12 males and 13 females. 48 tenants left, four of whom returned.

The receipts for the tenements were £1,078 6s. 6d.; arrears, £2 6s. 9d.; bad debts, 6s. 6d.

The lodging-houses were availed of by 26,333 lodgers, viz.—24,063 males and 2,270 females. The receipts were £439 12s. 9d. Total from the Benburb-street tenements and lodging-houses, £1,517 19s. 3d.

BENBURB-STREET TENEMENTS AND LODGING-HOUSES.

Receipts, Year 1893				Payments, 1893						
	£	s.	d.		£	s.	d.	£	s.	d.
Tenements	1,077	16	6	Capital outlay,	27,273	16	5			
Lodging-houses	410	2	9	WORKING EXPENSES—						
				Wages of Staff ...	327	18	0			
				Rates & Taxes, Coal, Gas, Repairs, &c.,	589	15	7			
								917	13	7
				CAPITAL ACCOUNT—						
				Loan of £6,500—						
				Principal ...	164	11	2			
				Interest ...	198	10	11			
								363	2	1
				Loan of £20,000—						
				Dividend on Stock, 3¼ per cent. ...	650	0	0			
				Sinking Fund ...	120	0	0			
Dr. Balance	532	16	5					770	0	0
	£2,050	15	8					£2,050	15	8

BOW-LANE ARTISANS' DWELLINGS.

The Bow-lane tenements were fully occupied on the 31st December, 1893. The inmates composed 364 persons, viz.—184 males and 180 females.

There were four deaths during the year, namely—one woman, aged 46 years, from general debility; one child, aged three years, from "water on brain;" one of ten months old, from measles, and one of five months old, from convulsions.

There were 21 births—12 males and 9 females.

29 tenants left during the year, one of whom returned.

The receipts were £661 5s. 9d; arrears, 12s. 9d.; bad debts, nil.

The total receipts from all the artisans' dwellings and nightly lodging-houses owned by the Corporation in 1893 were £2,179 5s.

BOW-LANE COTTAGES.

Capital Outlay, including Purchase Money of Site, £10,004 13s. 3d.

RECEIPTS—	£	s.	d.	PAYMENTS, 1893—	£	s.	d.	£	s.	d.
	661	5	9	Principal ...	258	2	6			
				Interest ...	317	3	7			
								575	6	1
				Wages	19	10	0			
				Rates, Taxes, Repairs, &c., ...	342	14	5			
								362	4	5
								937	10	6
Dr. Balance	18	2	3	Deduct payment on foot of Principal				258	2	6
	£679	8	0					£679	8	0

I have received the following information from the Dublin Artisans' Dwellings Co. :—

Return showing No. of Tenements and Population on 31st December, 1892, within and without the City of Dublin boundary.

CITY OF DUBLIN.		Tenements	Vacancies	Population
Block Buildings	5	361	47	7,338
Houses	8	16	—	
Houses and Cottages	1,232	1,232	6	
OUTSIDE THE CITY.				
Harold's Cross Cottages :— Houses and Cottages	150	150	—	645
Bray Cottages :— Houses and Cottages	62	62	1	226

ISAAC YEATES,
Secretary.

INSPECTION OF ARTISANS' DWELLINGS FOR REBATE OF TAXES.

Under the provisions of the Dublin Corporation Act of 1892, a reduction on the taxation of premises let to artisans and labourers may be allowed, provided that the annual valuation of such premises does not exceed £8.

The duty of seeing that the dwellings on which a reduction of taxation is requested are suitable for artisans' dwellings, has been entrusted to me, and its execution involves a considerable expenditure of time and care.

In 1893 the following applications were made for reduction of taxes :—

North Side	1,670
South Side	1,497
Total,	3,167

On the north side 278, and on the south side 283 were found to be too inferior to justify a reduction of taxes in their cases. Therefore, the dwellings found to be suitable and unsuitable as artisans' dwellings were as follows :—

Suitable	2,606
Unsuitable	561
Total,	3,167

It is interesting to note that the desire to get a reduction of taxes on these dwellings has been a powerful incentive to the persons owning them to improve their condition. Very many yards have been concreted, and the sanitary accommodation of scores of them has been much improved.

Estimated Expenditure of the Public Health Committee's Improvement Fund Sanitary Account, for the year to end 31st December, 1894, together with the Estimates for the year 1893, and the Expenditure (Estimated) chargeable against same.

	Estimates, 1894			Estimates, 1893			Expenditure, 1893		
	£	s.	d.	£	s.	d.	£	s.	d.
Salaries, &c. :—									
Superintendent Medical Officer, &c.	1000	0	0	1000	0	0	1000	0	0
Consulting Sanitary Officer	150	0	0	150	0	0	150	0	0
Secretary	300	0	0	300	0	0	300	0	0
Assistant in City Accountant's Department	83	0	0	100	0	0	78	0	0
Proportion of Law Agent's Salary, and Assistant's Expenses ...	200	0	0	200	0	0	225	0	0
Proportion of Salary of Mr. James Andrews, C.E.	50	0	0	48	15	0	50	0	0
Wages of Office Attendant	78	0	0	78	0	0	75	0	0
	1861	0	0	1876	15	0	1878	0	0
Sanitary Staff :—									
One Inspector	163	0	0	163	0	0	163	0	0
Two Sergeants and Six Constables	782	2	8	782	2	8	782	2	8
Civilians	1400	0	0	1400	0	0	1263	4	2
	2345	2	8	2345	2	8	2208	6	10
Poundage on Collection of Sanitary Fines	30	0	0	30	0	0	30	9	2
Medical Certificates for Compulsory Interments	10	10	0	10	10	0	7	7	0
Fees to Registrars of Burial Grounds	100	0	0	100	0	0	100	0	0
	140	10	0	140	10	0	137	16	2
Port Hospital Ship :—									
Proportion of Expenses and Maintenance	100	0	0	65	0	0	98	1	11
Disinfection, Removal of Patients to Hospital :—									
Proportion of Rent of Depot	20	0	0	20	0	0	20	0	0
Maintenance and Fuel, exclusive of Gas Fuel	5	0	0	10	0	0	2	0	0
Disinfecting Chemicals, Apparatus, &c.	120	0	0	35	0	0	72	11	6
Gas	25	0	0	15	0	0	29	1	7
Salary of Superintendent	104	0	0	104	0	0	104	0	0
Wages of Staff, Disinfectors, Limewashers, Drivers, &c. ...	538	0	0	423	0	0	538	0	0
Maintenance of Cabs and Vans	20	0	0	30	0	0	40	0	0
Forage and Veterinary Services...	85	0	0	76	0	0	80	0	0
Purchase of Horse	..			..			35	0	0
Clothing for Men	20	0	0	20	0	0	20	0	0
Proportion of Cost of Telephone	5	0	0	5	0	0	5	0	0
Compensation for Infected Bedding destroyed	133	0	0	65	0	0	133	0	0
Horse Hire	10	0	0	...			78	0	0
Estimate as provision to meet apprehended Epidemic of Cholera, &c.	1000	0	0	500	0	0	300	0	0
	2085	0	0	1303	0	0	1456	13	1
Carried forward, £	6531	12	8	5730	7	8	5778	18	0

Estimated Expenditure of the Public Health Committee's Improvement Fund Sanitary Account, for the year to end 31st December, 1894, together with the Estimates for the year 1893, and the Expenditure (Estimated) chargeable against same—*(continued)*.

	Estimates, 1894			Estimates, 1893			Expenditure, 1893		
	£	s.	d.	£	s.	d.	£	s.	d.
Brought forward,	6531	12	8	5730	7	8	5778	18	0
Morgue—									
Rent, Maintenance, and Wages of Registrar	120	0	0	120	0	0	126	11	11
Food and Drugs Department:—									
Messengers for Food Inspection	45	10	0	45	10	0	45	10	0
Messenger for City Analyst	39	0	0	39	0	0	39	0	0
Expenses in Confiscation of Unsound Food	10	0	0	5	0	0	22	11	0
	94	10	0	89	10	0	107	1	0
Building Surveyors—									
Salaries (proportion) of W. Butler and D. J. Walsh	200	0	0	200	0	0	213	6	8
Cleansing Liffey Foreshores	200	0	0	100	0	0	230	11	0
Baths and Wash houses:—									
Salaries and Wages	596	6	0	575	0	0	657	19	4
Fuel...	282	15	0	320	0	0	274	12	3
Disinfectants, Soap, Soda, &c.	16	10	0	16	0	0	15	18	0
Repairs, &c.	109	0	0	100	0	0	69	9	8
Structural Alterations	...			300	0	0	410	3	6
Stationery	11	17	6	13	0	0	20	4	0
Gas ...	80	0	0	78	10	0	76	8	8
Insurance	21	0	0	10	2	0	15	16	9
Rates and Taxes	45	0	0	45	0	0	43	14	2
Sundries	15	19	0	15	0	0	22	7	2
Bathing Dresses, &c.	87	11	0	...			...		
	1265	18	6	1472	12	0	1606	13	6
Repairing and Painting Urinals	100	0	0	100	0	0	60	0	0
Contagious Diseases (Animals) Act:—									
Registrar of Dairies and Dairy Yards	78	0	0	78	0	0	78	0	0
Two Inspectors	143	0	0	156	0	0	143	0	0
Two Assistant Inspectors	117	0	0	117	0	0	117	0	0
Stationery, Books, Advertisements, &c.	5	0	0	5	0	0	5	0	0
Inspector of Slaughter Houses	52	0	0	...			36	0	0
	395	0	0	356	0	0	379	0	0
Carried forward, £	8907	1	2	8168	9	8	8502	2	1

Estimated Expenditure of the Public Health Committee's Improvement Fund Sanitary Account, for the year to end 31st December, 1894, together with the Estimates for the year 1893, and the Expenditure (Estimated) chargeable against same—(*continued*).

	Estimates, 1894			Estimates, 1893			Expenditure, 1893		
	£	s.	d.	£	s.	d.	£	s.	d.
Brought forward,	8907	1	2	8168	9	8	8502	2	1
Advertising, Printing, Stationery, &c.	400	0	0	400	0	0	431	2	0
Expenses *re* Notification of Infectious Diseases Act	200	0	0	60	0	0	200	0	0
Pleasure Grounds:—									
Christ Church Precinct	50	0	0	50	0	0	50	0	0
St. Mary's Graveyard	50	0	0	50	0	0	50	0	0
Capuchin do.	13	0	0	13	0	0	13	0	0
Queen's-square	105	0	0	105	0	0	141	4	3
Improvement of Hill-street Graveyard	620	0	0	...			...		
	838	0	0	218	0	0	254	4	3
Superannuation to Mr. Alcock	26	0	0	26	0	0	26	0	0
Laboratory and 17 Castle-street:—									
Rent of Premises	35	1	6	35	1	6	35	1	6
,, Telephone	10	0	0	10	0	0	10	0	0
Alterations, Painting, Gas, &c.	20	0	0	20	0	0	89	2	11
Additional Laboratory Assistance	120	0	0	...			120	0	0
	185	1	6	65	1	6	254	4	5
Abattoir:—									
Salary, due late Superintendent	...			...			17	4	5
Law Costs	...			...			70	3	6
Sundries	...			...			10	0	0
	...			...			97	7	11
	10556	2	8	8937	11	2	9765	0	8
Contingencies, 5 per cent.	527	16	2	446	17	7	336	18	3
JOSEPH G. BOLGER.									
Carried forward, £	11083	18	10	9384	8	9	10101	18	11

Estimated Expenditure of the Public Health Committee Improvement Fund Sanitary Account, for the year to end 31st December, 1894, together with the Estimates for the year 1893, and the Expenditure (Estimated) chargeable against same—(*continued*).

		Estimates, 1894	Estimates, 1893	Expenditure, 1893
		£ s. d.	£ s. d.	£ s. d.
Brought forward,		11083 18 10	9384 8 9	10101 18 11
Instalment of Principal and Interest on Loans—				
Payable to the Commissioners of Public Works, Ireland, viz. :—				
Principal	£1281 19 2			
Interest	1341 7 3			
		2623 6 5	2101 5 8	1599 3 8
Dublin Corporation Consolidated Loans Fund—				
Contributions in respect of £135,438, proportion of Stock—				
Sinking Fund		925 1 6	916 17 10	937 16 2
Dividend		4401 14 7	4401 14 7	4401 14 8
		5326 16 1	5318 12 5	5339 10 10
Proportion of Stamp Duty on Stock Inscribed		67 14 5	67 15 0	67 15 0
Carried forward—Totals, £		19101 15 9	16872 1 10	17108 8 5

Estimated Expenditure of the Public Health Committee's Improvement Fund Sanitary Account, for the year to end 31st December, 1894, together with the Estimates for the year 1893, and the Expenditure (Estimated) chargeable against same.—(*continued*).

	Estimates, 1894.			Estimates, 1893			Expenditure, 1893		
	£	s.	d.	£	s.	d.	£	s.	d.
Totals brought forward,	19101	15	9	16872	1	10	17108	8	5
Estimated Income for year 1894, from sources other than rates, viz. :—									
Recoupment by Local Government Board on account of Salaries ..	1008	15	9	827	6	4	822	14	1
Ditto, by Veterinary Department, moiety of Expenditure under Contagious Diseases (Animals) Act	170	0	0	178	0	0	170	0	0
Ditto, Grand Jury Fund—Services of Sanitary Officers *re* Committals to Industrial Schools	52	0	0	52	0	0	52	0	0
Grand Jury Presentment *re* Morgue	100	0	0	100	0	0	100	0	0
Proportion of Government Bounty	900	0	0	900	0	0	900	0	0
Proportion of Probate Duty Grant	250	0	0	280	0	0	236	7	0
Receipts from Abattoir	..			..			487	8	10
Receipts from Baths and Wash-houses	1250	0	0	1220	0	0	1220	0	0
Receipts from Fines	500	0	0	500	0	0	500	0	0
Receipts from Rents	40	0	0	53	7	4	39	0	10
Receipts from Disinfection of Bedding	10	0	0	10	0	0	10	0	0
Receipts from Private Improvement Expenses	500	0	0	1255	0	0	774	8	0
Receipts from Miscellaneous Law Costs	..			..			0	13	0
Amount to be transferred from the Dwellings' House Improvement Fund in relief of Contributions for Dividend on Stock and Principal and Interest on Loans	1900	0	0	2000	0	0	2000	0	0
Recoupment by Sewers Department for Disinfecting Fluid supplied	..			..			142	9	0
Ditto, by Cleansing do. do. do. ..	..			..			45	10	0
	6680	15	9	7375	13	8	7500	10	9
Deduct Excess of Debits over Credits—Account Estimates, 1892 ..	..			789	0	2	780	10	1
Ditto do. Account Estimates, 1893 ..	102	19	5	..			..		
	6577	16	4	6586	13	6	6720	0	8
	12523	19	5	10285	8	4	10388	7	9
Loss in Collection, 5 per cent.	626	4	0	514	5	5			
Cost of Collection, 2½ per cent.	328	15	0	269	19	10			
Totals, £	13478	18	5	11069	13	7			

PUBLIC HEALTH COMMITTEE'S IMPROVEMENT FUND SANITARY ACCOUNT, YEAR TO END 31ST DECEMBER, 1893

STATEMENT OF SAVINGS AND EXCESS EXPENDITURE (ESTIMATED)	Credit Balance			Debit Balance		
	£	s.	d.	£	s.	d.
Salaries, &c.	...			1	5	0
Sanitary Staff	136	15	10	...		
Poundage on Fines	2	13	10	..		
Port Hospital Ship	...			33	1	11
Disinfection	...			153	13	1
Morgue	..			6	11	11
Food and Drugs	..			17	11	0
Building Surveyors	..			13	6	8
Liffey Foreshores	...			130	11	0
Baths and Wash-houses	..			134	1	6
Urinals	40	0	0	..		
Abattoir	...			97	7	11
Contagious Diseases (Animals) Act	...			23	0	0
Advertising, Printing, Stationery, &c.	...			31	2	0
Infectious Diseases Act	...			140	0	0
Pleasure Grounds	..			36	4	3
Laboratory	...			189	2	11
Contingencies	109	19	4	..		
Instalments of Principal and Interest on Loans	502	2	0	..		
Sinking Fund	...			20	18	4
Dividend	...			0	0	1
£	791	11	0	1027	17	7
Deduct Cr. Balance as above	...			791	11	0
				236	6	7

PUBLIC HEALTH COMMITTEE'S IMPROVEMENT FUND SANITARY ACCOUNT, YEAR TO END 31ST DECEMBER, 1893.

STATEMENT OF BALANCES (ESTIMATED) ON INCOME ACCOUNT			Debit Balance	Credit Balance
			£ s. d.	£ s. d.
Recoupment by Local Government Board			4 12 3	–
Do. Veterinary Department			8 0 0	..
Probate Duty Grant			43 13 0	–
Abattoir			..	487 8 10
Rents			14 6 6	..
Private Improvement Expenses			480 12 0	..
Law Costs			..	0 13 0
Recoupment by Sewers Department			..	142 9 0
Do. Cleansing Department			..	45 10 0
Amount included in Balance Sheet, year 1892, for Private Improvement Expenses		£3691 15 9		
Less Amount received in 1893 on account of same	£774 8 0			
Amount Estimated to be received in 1894	500 0 0	1274 8 0	2417 7 9	
			2968 11 6	676 0 10
Balance to Credit on foot of Balance Sheet, 31st December, 1892			..	1636 17 8
Amount included in Estimates for 1893, as estimated Excess of Debit over Credit			..	789 0 2
				3101 18 8
Add Debit Balance, as per Contra			236 6 7	
			3204 18 1	
Deduct Cr. Balance as above			3101 18 8	
otal Debit Balance charged to Estimates Account, 1894			102 19 5	

PUBLIC HEALTH COMMITTEE—SEWER DEPARTMENT.

Estimated Expenditure for the year to end 31st December, 1894, together with the Estimates for the year 1893, and the Expenditure (Estimated) chargeable against same.

NORTH SEWERS			Estimates, 1894	Estimates, 1893	Estimated Expenditure, 1893
			£ s. d.	£ s. d.	£ s. d.
Maintenance of Sewers			2000 0 0	2000 0 0	2199 6 5
Repairs of Openings			300 0 0	300 0 0	267 12 9
Implements and Sundries			70 0 0	70 0 0	70 0 0
Pumping Station, East Road			500 0 0	300 0 0	302 12 0
New Works			105 0 0	500 0 0	1729 11 10
			2975 0 0		
Contingencies			148 0 0	177 15 0	
			3123 0 0		
Salaries and Compensations			400 0 0	350 0 0	400 0 0
Rents and Proportion of Rents			16 15 4	20 0 0	16 15 4
Proportion of General Account, Stationery			20 0 0	15 0 0	20 0 0
			3559 15 4	3732 15 0	5005 18 4
JOSEPH G. BOLGER.					
Estimated Debit, Estimates, 1893		£1871 17 10			
Balance to Credit, as per Balance Sheet, 31st December, 1892	£1006 16 4				
Less Balance to Credit, as per Balance Sheet, 31st December, 1891	956 4 0				
	£50 12 4				
Add Estimated Amount of Government Bounty in lieu of Rates, year to 25th March, 1894 ...	160 0 0				
		210 12 4			
			1661 5 6	1756 10 10	1166 16 4
			5221 0 10	1967 4 2	3839 2 0
Loss in Collection, 5 per cent.			261 1 0	98 7 3	
Cost of Collection, 2½ per cent.			137 1 0	51 12 9	
		£	5619 2 10	2117 4 2	

PUBLIC HEALTH COMMITTEE—SEWER DEPARTMENT.

Estimated Expenditure for the year to end 31st December, 1894, together with the Estimates for the year 1893, and the Expenditure (Estimated) chargeable against same—(*continued*).

SOUTH SEWERS.		Estimates, 1894	Estimates, 1893	Estimated Expenditure, 1893
		£ s. d.	£ s. d.	£ s. d.
Maintenance of Sewers		2350 0 0	2300 0 0	2204 15 7
Repairs of Openings		350 0 0	400 0 0	320 13 5
Implements and Sundries		60 0 0	50 0 0	60 0 0
Pumping Station, Forbes-street		400 0 0	350 0 0	355 17 8
New Works		505 0 0	430 0 0	8 11 1
		3665 0 0		
Contingencies		183 0 0	201 1 0	
		3848 0 0		
Salaries and Compensations		510 12 7	460 0 0	510 12 7
Rents and Proportion of Rents		23 15 11	13 0 0	23 15 11
Proportion of General Account, Stationery		20 0 0	18 0 0	20 0 0
		4402 8 6	4222 1 0	3504 6 3
JOSEPH G. BOLGER.				
Estimated Savings, Estimates, 1893	£456 17 9			
Balance to Credit, as per Balance Sheet, 31st December, 1892	30 1 4			
Add Estimated Amount of Government Bounty in lieu of Rates, year to 25th March, 1894	110 0 0	596 19 1	400 18 4	140 1 4
		3805 9 5	3821 2 8	3364 4 11
Loss in Collection, 5 per cent.		190 5 6	191 1 2	
Cost of Collection, 2½ per cent.		99 17 10	100 6 1	
	£	4095 12 9	4112 9 11	

PUBLIC HEALTH COMMITTEE—SEWER DEPARTMENT.

ESTIMATES FOR YEAR TO END 31ST DECEMBER, 1894.

Savings and Excess Expenditure, Account Estimates, year to 31st December, 1893	Cr.	Dr.
NORTH SEWERS.	£ s. d.	£ s. d.
Maintenance of Sewers	..	199 6 5
Repairs of Openings	32 7 3	..
Salaries and Compensations	..	50 0 0
Rents and Proportions of Rents	3 4 8	..
Proportion of General Account, Stationery	..	5 0 0
Pumping Engine, East-road	..	2 12 0
New Works	..	1229 11 10
Contingencies	177 15 0	..
Savings not realized as Estimated, Account Estimates, 1893	..	598 14 6
	213 6 11	2085 4 9
Deduct Credits	..	213 6 11
Amount brought to Debit of Estimates, 1894 £	..	1871 17 10
SOUTH SEWERS.	£ s. d.	£ s. d.
Maintenance of Sewers	95 4 5	..
Repairs of Openings	79 6 7	..
Salaries and Compensations	..	50 12 7
Rents and Proportions of Rents	..	10 15 11
Proportion of General Account, Stationery	..	2 0 0
Implements and Sundries	..	10 0 0
Pumping Station, Forbes-street	..	5 17 8
New Works	421 8 11	..
Contingencies	201 1 0	..
Savings not realized as Estimated, Account Estimates, 1893	..	260 17 0
	797 0 11	340 3 2
Deduct Debits	340 3 2	
Amount brought to Credit of Estimates, 1894 £	456 17 9	

TABLE OF LOANS CHARGEABLE

Committee	Purpose of Loan	Amount of Loan sanctioned	Loans not yet sanctioned and Proposed New Loans	Number of Years for Repayment	Rate of Interest per Cent.
		£ s. d.	£ s. d.		
PUBLIC HEALTH COMMITTEE'S ESTIMATES	Mortgage No. 340, for Mullinahack Scheme ..	7200 0 0	..	50	4
	Mortgage No. 339, do. Works ..	1500 0 0	..	20	3½
	Mortgage No. 241, for Tara-st. Works £3000 0 0 Less Amount abandoned .. 331 5 7	2668 14 5	..	20	3½
	Mortgage No. 332, for Sewer Works	4400 0 0	..	20	3½
	Mortgage No. 346, for Labourers' Dwellings, Benburb-street	6500 0 0	..	39½	3⅜
	Mortgage No. 343, for Pleasure Ground, Queen's Square .. .. £1600 0 0 Less Amount abandoned .. 150 0 0	1450 0 0	..	20	3½
	Mortgage No. 345, for Bow-lane Scheme	10325 0 0	..	40	3⅜
	Mortgage No. 354, for Pumping Station, Forbes-st.	4000 0 0	..	30	3½
	Mortgage No. , for Labourers' Dwellings, Blackhall-street	13000 0 0	..	40	3⅜
	Mortgage No. , for White's-lane Scheme—Works Account	..	12000 0 0	40	3⅜
	Mortgage No. , do., Purchase Account,	5000 0 0	..	50	4
	Mortgage No. , Private Improvement Expenses, Sewers, &c.	..	300 0 0	30	3½
	Mortgage No. , Private Improvement Expenses, Roads and Footways	..	700 0 0	5	3½
	Mortgage No. , for Wood-quay Scheme—Purchase of Interests	..	30000 0 0	50	4
	Mortgage No. , Wood-quay Scheme—for Works	..	33000 0 0	20	3½
		56043 14 5	76000 0 0	..	..
ELECTRIC LIGHTING COMMITTEE'S ESTIMATES	Mortgage No. 352, for Buildings, &c.	4200 0 0	..		3½
	Mortgage No. 355, for Machinery, &c.	32800 0 0	..	25	3½
	Mortgage No. , or Cables and Pipes	7563 0 0	..	15	3½
	Mortgage No. , or Buildings, &c.	16837 0 0	..	25	3½
		61400 0 0	..	..	..

IMPROVEMENT RATE, &c.

ount of Loan ceived	Amount of Loan discharged out of Rates and out of Stock Capital Account	Balances of Loans remaining due on account of Money received: On Account of Loans stated in the II. Schedule to Loans Act, 1889	Balances of Loans remaining due on account of Money received: On Account of Loans received since 31st Dec., 1888	Amount of Loans required: Before 1st May, 1894	Amount of Loans required: After 1st May, 1894	Instalments of Principal and Interest payable in 1894: Principal	Instalments of Principal and Interest payable in 1894: Interest	Total for Principal and Interest	Totals
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
							Brought	forward,	17444 17 3
00 0 0	6072 0 0	..	1128 0 0	..	..	24 0 0	44 17 11	68 17 11	
00 0 0	225 0 0	..	1275 0 0	..	..	75 0 0	43 19 5	118 19 5	
68 14 5	1476 5 1	..	1192 9 4	..	..	76 18 10	41 1 2	118 0 0	
00 0 0	4090 0 0	..	310 0 0	..	..	20 0 0	10 13 6	30 13 6	
00 0 0	740 10 3	..	5759 9 9	..	..	164 11 2	192 19 11	357 11 1	
50 0 0	292 10 0	..	1157 10 0	..	..	72 10 0	39 17 7	112 7 7	
25 0 0	1120 0 0	..	9205 0 0	..	..	258 2 6	308 9 10	566 12 4	
00 0 0	150 0 0	..	2850 0 0	1000 0 0	..	133 6 8	133 11 8	266 18 4	
..	..	..	..	..	10000 0 0	125 0 0	168 15 0	293 15 0	
..	..	..	..	..	5000 0 0	62 10 0	84 7 6	146 17 6	
..	..	..	..	5000 0 0	..	100 0 0	199 0 0	299 0 0	
..	..	..	..	300 0 0	..	10 0 0	10 8 3	20 8 3	
..	..	..	..	700 0 0	..	140 0 0	23 5 6	163 5 6	
..	..	..	..	..	2000 0 0	20 0 0	40 0 0	60 0 0	
..	..	..	..	..	..	..	..	..	
43 14 5	14166 5 4	..	22877 9 1	7000 0 0	17000 0 0	1281 19 2	1341 7 3	2623 6 5	2623 6 5
				Total to be provided for by Improvement Rate, £					20068 3 8
200 0 0	308 0 0	..	3892 0 0	..	..	168 0 0	134 14 11	302 14 11	
300 0 0	1312 0 0	..	31488 0 0	..	..	1312 0 0	1090 12 0	2402 12 0	
..	..	..	..	3781 10 0	3781 10 0	450 0 0	207 7 6	657 7 6	
..	..	..	..	8418 10 0	8418 10 0	462 0 0	356 12 9	818 12 9	
000 0 0	1620 0 0	..	35380 0 0	12200 0 0	12200 0 0	2392 0 0	1789 7 2	4181 7 2	
					Total to be provided for out of Electric Lighting Account .. .. £				4181 7 2
					Total provided for Principal and Interest, 1894, on account of Improvement Rate and Electric Lighting Account .. £				24249 10 10

THIRTY SECOND
ANNUAL REPORT
OF
SIR CHARLES A. CAMERON, M.D.,
City Analyst,
FOR THE YEAR 1893.

During the year ended on the 31st December, 1893, the following articles were collected for analysis by the Inspectors of Food :—

INSPECTOR J. J. MYERS.

Articles.		Number.
Butter	... ...	15
Milk	... ...	3
	Total ...	18

INSPECTOR P. SHEEHAN.

Articles.		Number.
Butter	... ...	11
Milk	... ...	5
	Total ...	16

INSPECTOR T. LYONS.

Articles.	Number.
Butter	121
Milk	105
Buttermilk	45
Coffee	9
Whiskey	4
Vinegar	4
Pepper	1
Total	289

INSPECTOR J. J. KANE.

Articles.	Number.
Butter	34
Milk	105
Buttermilk	31
Coffee	18
Condensed Milk	5
Drugs	3
Pepper	3
Mustard	3
Total	202

INSPECTOR H. GREENE.

Articles	Number.
Butter	35
Milk	115
Buttermilk	18
Total	168

INSPECTOR J. HICKEY.

Articles.	Number.
Butter	80
Milk	191
Buttermilk	25
Coffee	8
Mustard	2
Total ...	306

INSPECTOR JAMES COOKE.

Articles.	Number.
Butter	6
Milk	146
Buttermilk	24
Total ...	176

For the Guardians of the South Dublin Union, there were analyzed—

Milk	49 Specimens.
Buttermilk	1 Specimen.
Total ...	50 Specimens.

For the Guardians of the North Dublin Union—

Butter	7	do
Milk	39	do
	46	do

For the House of Industry Hospitals—	
Milk	1 Specimen.
For the Governor of Mountjoy Prison—	
Milk	1 do
For Dr. Norman, Richmond Lunatic Asylum—	
Milk	11 Specimens.
Butter	8 do
For the Mater Misericordiæ Hospital—	
Milk	2 do
For Lieut.-Colonel J. H. Hughes, Royal Infirmary—	
Milk	1 Specimen.
For St. Margaret's College, Mespil-road—	
Milk	1 do
For Private Persons—	
Milk	9 Specimens.
Butter	1 Specimen.

Of the butter samples collected by Inspector Myers, 2 were adulterated. The other articles were found to be pure.

Of the butter samples collected by Inspector Sheeran, 2 were adulterated.

Of the butter samples collected by Inspector Lyons, 32 were adulterated; of the milk 17; and of the buttermilk 17.

Of the butter samples collected by Inspector Kane, 13 were adulterated; of the milk 16; of the buttermilk 15; and of the coffee 3.

Of the butter samples collected by Inspector Green, 2 were adulterated; of the milk 12; and of the buttermilk 2.

Of the butter samples collected by Inspector J. Hickey, 9 were adulterated; of the milk 25; and of the buttermilk 9.

Of the butter samples collected by Inspector Cooke, 2 were adulterated; of the milk 16; and of the buttermilk 10.

Eighteen of the specimens of milk analyzed for the South Dublin Union were adulterated.

Of the butter samples examined for the North Dublin Union, 2 were adulterated; and of the milk 2.

The milk analyzed for the House of Industry Hospitals was not adulterated.

Of the 11 milks examined for Dr. Norman, Richmond Lunatic Asylum, 2 were adulterated.

Two of the specimens of milk and the specimen of butter analyzed for private persons were adulterated.

ARTICLES OF FOOD ANALYZED IN 1893.

Article.		Number.	Pure.	Adulterated.
Milk	...	784	674	110
Buttermilk	...	144	91	53
Butter	...	318	253	65
Coffee	...	35	32	3
Mustard	...	5	5	—
Condensed Milk	...	5	5	—
Pepper	...	4	4	—
Whiskey	...	4	4	—
Vinegar	...	4	4	—
Drugs	...	3	3	—
Total	...	1,306	1,075	231

EXTENT OF ADULTERATION.

Of the samples of milk, 1 was adulterated with 6 per cent. of water; 4 with 7 per cent.; 7 with 8 per cent.; 5 with 9 per cent.; 16 with 10 per cent.; 17 with 11 per cent.; 7 with 12 per cent.; 3 with 13 per cent.; 7 with 14 per cent.; 3 with 15 per cent.; 5 with 16 per cent.; 2 with 17 per cent.; 1 with 18 per cent.; 2 with 20 per cent.; 1 with 21 per cent.; 1 with 24 per cent.; 2 with 25 per cent.; 1 with 26 per cent.; 1 with 28 per cent.; 3 with 30 per cent.; 1 with 31 per cent.; 1 with 32 per cent.; 1 with 40 per cent.; 1 with 50 per cent.; 1 with 70 per cent.; and 1 with 80 per cent.

Fifteen samples were deprived of their cream, as follows:—1 was deprived of 17 per cent.; 1 of 20 per cent.; 2 of 25 per cent.; 5 of 33 per cent.; 4 of 40 per cent.; 1 of 50 per cent.; and 1 of nearly all its cream.

Of the buttermilk samples one was adulterated with 10 per cent. of water.; 1 with 11 per cent.; 4 with 12 per cent.; 1 with 13 per cent.; 8 with 15 per cent.; 3 with 17 per cent.; 1 with 18 per cent.; 7 with 20 per cent.; 1 with 23 per cent.; 4 with 25 per cent.; 4 with 30 per cent.; 2 with 33 per cent.; 1 with 34 per cent.; 1 with 35 per cent.; 1 with 37 per cent.; 2 with 40 per cent.; 1 with 42 per cent.; 2 with 45 per cent.; 1 with 47 per cent.; 3 with 50 per cent.; 2 with 60 per cent.; 1 with 70 per cent., and 1 with 80 per cent.

Of the samples of butter 1 was adulterated with excess of water, of which it contained 20·5 per cent., 16 per cent. being the maximum that should be permitted. Fourteen samples were adulterated with margarine, as follows:—1 with 15 per cent.; 4 with 20 per cent.; 2 with 30 per cent.; 1 with 45 per cent.; 1 with 60 per cent.; 1 with 70 per cent., and 4 with 75 per cent. Fifty samples were composed almost entirely of fats foreign to butter, *i.e.*, were margarine.

There were 3 samples of coffee adulterated with 30, 35 and 35 per cent. of chicory.

DURING THE YEAR 1893 THE FOLLOWING PERSONS WERE, UNDER THE PROVISIONS OF THE "SALE OF FOOD AND DRUGS AND MARGARINE ACTS," SUCCESSFULLY PROSECUTED BY INSPECTOR TIMOTHY LYONS.

Name	Address	Articles Sold	Adulterated with	Fine		
				£	s.	d.
Alpin, Esther	34 Great Charles-street	Milk	25 per cent. water	2	0	0
Anderson, Thomas	18 Anglesea-street	do.	10 do.	0	10	0
Byrne, James	12 Cross Kevin-street	Milk	17 do.	1	10	0
Byrne, Bridget	37 Upper Clanbrassil-st.	do.	20 do.	3	0	0
Byrne, Mary	23 Sth. Richmond-street	Having Margarine unlabelled	—	4	0	0
Cavey, James	25 East Essex-street	Milk	20 per cent. water	1	10	0
Clarke, Peter	78 Innisfallen-parade	do.	18 do.	2	0	0
Cogan, Denis	82 Queen-street	Having Margarine unlabelled	—	5	0	0
Cogan, John	80 Lr. Camden-street	do.	—	10	0	0
Condron, John	39 Bolton-street	do.	—	2	0	0
Coady, Michael	92 Marlborough-street	Milk	8 per cent. water	1	0	0
Connor, Michael	102 Upper Church-street	do.	60 do.	5	0	0
Condron, Maria	38 N. Cumberland-street	do.	15 do.	1	0	0
Coyle, Eugene	64 Great Britain-street	Having Margarine unlabelled	—	5	0	0
Cooney, Jane	3 Benburb-street	Milk	25 per cent. water	3	0	0
Denning, Julia	18 Pill-lane	Having Margarine unlabelled	—	3	0	0
Doyle, John	11 Duke-street	Milk	9 per cent. water	1	0	0
Doyle, Margaret	5 Lower Dorset-street	do.	14 do.	1	0	0
Doyle, M. J.	82 Ballybough-road	Having Margarine unlabelled	—	5	0	0
Dunne, Margaret	40 Westland-row	do.	—	5	0	0
Dunne, Thomas	107 Great Britain-street	Milk	15 per cent. water	1	0	0
Dwyer, Joseph	42 Westland-row	Having Margarine unlabelled	—	4	0	0
Ennis, Francis	9 Mabbot-street	do.	—	5	0	0
Farrell, Loughty	16 Meath-street	Milk	35 per cent. water	5	0	0
Farrell, Mary A.	10 Redmond's-hill	Refusing sample of Milk for Analysis	—	4	0	0
Finlay, James	1A York-street	Milk	17 per cent. water	2	0	0
Fitzgerald, Mary	39 Brunswick-street	Having Margarine unlabelled	—	3	0	0
Flood, Michael	Inchicore	Milk	30 per cent. water	3	0	0
Do.	do.	do.	24 do.	2	0	0
Fox, Johanna	39 North Circular-road	Having Margarine unlabelled	—	2	10	0
Gaskin, Francis	42 Castle-street	do.	—	4	0	0
Gilligan, Edward	73 Ballybough-road	do.	—	5	0	0
Grogan, Patrick	39 Amiens-street	Milk	40 per cent. water	3	0	0
Hanlon, Peter	15 Lower Camden-street	Having Margarine unlabelled	—	3	0	0
Ditto	do.	do.	—	5	0	0

Name	Address	Articles Sold	Adulterated with	Fine
Hallyburton, George	40 Sth. Gt. George's-st.	Assaulting Inspector	—	1 0 0
Healy, Bridget ...	120 James's-street ...	Milk	60 per cent. water	2 0 0
Jordan, John ...	52 Meath-street ...	Having Margarine unlabelled	—	5 0 0
Kavanagh, Sabina ...	77 Marlborough-street	Milk	10 per cent. water	1 0 0
Kealy, Laurence ...	24 North Gloucester-pl.	do.	15 do.	1 0 0
Kennedy, James ...	Templeogue ...	do.	15 do.	1 0 0
Kenny, Joseph ...	29 Thomas-street ..	Having Margarine unlabelled	—	10 0 0
Leigh, Anna ...	22 & 23 Mary's-abbey...	do.	—	5 0 0
Mahon, John ...	15 Pill-lane ...	Milk	15 per cent. water	1 0 0
Maher, Patrick ..	1 Camden-row ...	do.	8 do.	0 10 0
M'Donnell, Michael	62 Upper Dorset-street	Having Margarine unlabelled	—	5 0 0
Do. ...	66 do. ...	do.	—	5 0 0
Morgan, Rosanna ...	70 Marlborough-street	Refusing sample of Milk for Analysis	—	2 0 0
M'Cann, John ...	5 Summerhill-parade ...	Milk	13 per cent. water.	1 0 0
Mulhall, Thomas ...	62 South Circular-road	do.	25 do.	3 0 0
Murphy, Annie ...	18 North Gloucester-pl.	do.	50 do.	3 0 0
Murphy, John ...	162 Phibsborough-road	Having Margarine unlabelled	—	5 0 0
Murphy, Michael ...	45 Bolton-street ...	Refusing sample of Milk for Analysis	—	5 0 0
O'Keeffe, Norah ...	2 Exchequer-street ...	Having Margarine unlabelled	—	4 0 0
O'Loughlin, Michael	19 South Richmond-st.	do.	—	4 0 0
Reilly, James ...	14 North-strand ...	Milk	10 per cent. water	0 10 0
Silke, Maria ...	18 South Richmond-st.	Having Margarine unlabelled	—	3 0 0
Smith, Laurence ...	34 Thomas-street ...	do.	—	5 0 0
Smith, John ..	64 Benburb-street ...	Milk	12 per cent. water	1 0 0
Vokes, Mary ...	186 Townsend-street ...	do.	9 do.	0 10 0
Wogan, Peter ...	3 Little Britain-street ...	do.	16 do.	2 0 0
Wright, Robert ...	93 Upper Dorset-street	Having Margarine unlabelled	—	5 0 0
				194 10 0

DURING THE YEAR 1893 THE FOLLOWING PERSONS WERE, UNDER THE PROVISIONS OF THE "SALE OF FOOD AND DRUGS AND MARGARINE ACTS," SUCCESSFULLY PROSECUTED BY INSPECTOR JOHN J. KANE.

Name	Address	Articles Sold	Adulterated with	Fine		
				£	s.	d.
Blout, John ...	5 Lower Merrion-street	Milk	18 per cent. water	0	10	0
Brady, Andrew ...	99 Phibsborough-road ...	Coffee	35 per cent. of chicory	4	0	0
Brett, William ...	111 Lr. Gloucester-st. ...	Breach of Margarine Act	—	2	0	0
Burns, John ...	30 Talbot-street ...	do.	—	5	0	0
Byrne, Catherine ...	26 Stoneybatter .	Milk	14 per cent. water	0	10	0
Byrne, Patrick ...	53 Bow-lane, West ..	do.	13 do.	1	0	0
Collins, Mary ...	17 Nicholas-street ...	Breach of Margarine Act	—	3	0	0
Corcoran, Joseph ...	33 Cuffe-street ...	Milk	40 per cent. water	2	0	0
Cogan, D. J. ...	115 Thomas-street ...	Breach of Margarine Act	—	5	0	0
Daly, Catherine ...	69 Charlemont-street ...	do.	—	3	0	0
Donohoe, Patrick ...	8 Wicklow-terrace ...	do.	—	2	0	0
Doyle, James ...	152 Phibsborough-road	Milk	8 per cent. water	1	0	0
Duff, William	11 Grand Canal-street ...	do.	34 do.	5	0	0
Droyer, Margaret ...	7 Poolbeg-street ...	do.	20 do.	2	0	0
Fitzsimons, Anna ...	93 North King-street ...	do.	13 do.	0	10	0
Fowler, Richard ...	9 Poplar-row ..	do.	28 do.	3	0	0
Griffith, James ...	51 & 52 North King-st.	Coffee	35 per cent. of chicory	4	0	0
Hanlon, Peter ...	15 Lower Camden-street	Breach of Margarine Act	—	5	0	0
Ivers, Thomas ..	23 Old Kilmainham ...	Milk	Deprived of ⅓ its cream	2	0	0
Kavanagh, Denis ...	2 Charlemont-place ...	do.	10 per cent. water	1	0	0
Kiernan, John ...	35 Bow-lane, West ...	do.	40 do.	3	0	0
Leavy, Jane ...	42 South King-street ...	do.	12 do.	1	0	0
M'Grane, W. ...	12 Red Cow-lane ..	do.	15 do.	1	0	0
M'Mahon, Margaret	95 Talbot-street ...	do.	25 do.	1	0	0
Meehan, Thomas ...	3 Whitefriar-place ..	do.	11 do.	0	10	0
Monks, Christopher	25 Mayor-street ..	do.	17 do.	2	0	0
Murphy, Anne ...	6 Thomas-court ...	do.	20 do.	2	0	0
Murphy, Michael ...	45 Bolton-street ...	do.	15 do.	1	0	0
O'Connor, Michael ...	102 Upper Church-street	do.	33 do.	3	0	0
O'Neill, Mary ...	116 Lower Gardiner-st.	do.	13 do.	1	0	0
Reilly, Charles ...	94 North King-street ...	do.	11 do.	0	10	0
Rowe, William ..	4 Berkeley-road ...	do.	11 do.	0	10	0
					costs	
Smith, James ...	32 Upper Tyrone-street	do.	30 do.	3	10	6
Smith, Mary ...	52 Great Britain-street...	do.	25 do.	3	0	0
Smith, Mary ...	24 Mabbot-street ...	do.	9 do.	0	10	0
Tierney, Patrick ...	5 Chatham-street ...	Butter	20 do.	3	0	0
Ward, Mary ...	141 Townsend-street ...	Coffee	30 per cent. of chicory	3	0	0
			£	80	10	0
			Costs ...	0	10	6
			Total £	81	0	6

During the Year 1893 the following Persons were, under the Provisions of the "Sale of Food and Drugs and Margarine Acts," successfully Prosecuted by Inspector John Hickey.

Name	Address	Articles Sold	Adulterated with	Fine		
				£	s.	d.
Atkins, Henry ...	9 Hamilton-row ...	Milk	10 per cent. water	0	10	0
Bagot, Canon ...	16 Upper Kevin-street	do.	12 do.	1	0	0
Bradley, Robert ...	4 Hamilton-row ...	do.	10 do.	0	1	0
Brady, Christina ...	92 Lr. Mount-street ...	do.	Deprived of ¼ its Cream	2	0	0
Byrne, Bridget ...	37 Upper Clanbrassil-st.	do,	20 per cent. water	2	0	0
Carroll, Maria ...	42 Moss-street ...	do.	37 do.	1	0	0
Corcoran, Joseph ...	33 Cuffe-street ..	do.	20 do.	1	0	0
Courtney, Julia ...	22 Old Kilmainham ...	do.	25 do.	0	10	0
Donohoe, Sarah ...	6 Sth. Richmond-street	do.	70 do.	3	0	0
Doyle, John ...	11 Duke-street ...	do.	9 do.	0	10	0
Doyle, Thomas ...	9 Lr. Camden-street ...	Having Margarine unlabelled	—	5	0	0
Duffy, James ...	106 Townsend-street ..	Milk	15 per cent. water	1	0	0
Dwyer, Margaret ...	7 Poolbeg-street ...	do.	25 do.	3	0	0
Finlay, James ...	1A York-street ...	do.	10 do.	1	0	0
Fitzwilliam, Eliza ...	37 Cuffe-street ...	Having Margarine unlabelled	—	3	0	0
Freeney, Rosanna ...	13 South King-street ...	Milk	21 per cent. water	3	0	0
Gartland, James ...	26 Thomas-street ...	do.	20 do.	1	0	0
Hutchinson, William	55 Charlemont-street ...	do.	10 do.	0	10	0
Kavanagh, Maurice...	75 Coombe ...	Having Margarine unlabelled	—	5	0	0
Kelly, James ...	157 North Strand ...	Milk	11 per cent. water	0	10	0
Kelly, Thomas ...	34 Braithwaite-street ...	do.	15 do.	1	0	0
Kennedy, Kate ...	8 Sth. Richmond-street	do.	8 do.	0	1	0
Leeson, John ...	8 Coombe ...	do.	11 do.	1	0	0
Lonergan, Edward ...	41 Lower Stephen-street	do.	20 do.	2	0	0
Mathews, Daniel ...	26 Sth. Richmond-street	do.	80 do.	10	0	0
Malone, Mary ...	10 Charlotte-street ...	do.	12 do.	1	0	0
M'Cabe, John ...	10 West Essex-street ...	do.	16 do.	1	0	0
M'Donald, Thomas...	136½ Gt. Brunswick-st.	do.	13 do.	1	0	0
Munro, Donald ...	73 Camden-street ...	Having Margarine unlabelled	—	5	0	0
Murphy, Peter ...	60 Sth. Gt. George's-st.	do.	—	3	0	0
O'Brien, Margaret ...	56½ Lr. Camden-street	Milk	70 per cent. water	10	0	0
O'Loughlin, Cathrne.	43 Wentworth-place ...	do.	11 do.	0	10	0
O'Toole, Loughlin	3 Sth. Frederick-street	do.	7 do.	0	10	0

Name	Addrees	Articles Sold	Adulterated with	Fine		
				£	s.	d.
Reilly, James T. ...	2 Dolphin's Barn ...	Having Margarine unlabelled	—	5	0	0
Silke, Maria ...	18 Sth. Richmond-street	do.	—	3	0	0
Smith, John ...	182 Townsend-street ...	Milk	30 per cent. water	1	0	0
Valentine, Sarah ...	163 Gt. Brunswick-st. ...	Having Margarine unlabelled	—	0	10	0
Wade, Bridget ...	71 Lr. Camden-street ...	Milk	20 per cent. water	2	0	0
				82	2	0
			Costs ...	1	1	0
			Total £	83	3	0

During the Year 1893 the following Persons were, under the Provisions of the "Sale of Food and Drugs and Margarine Acts," successfully Prosecuted by Inspector Henry Green.

Name	Address	Article	Adulterated with	Fine		
				£	s.	d.
Caulfield, Ellen ...	9 South King-street ..	Milk	20 per cent. water	2	0	0
Crowley, Mary ...	33 Great Britain-street	Breach of Margarine Act	—	3	0	0
Finegan, Thomas ...	175 North King-street...	Milk	14 per cent. water	0	10	0
Flowers, Frederick ..	41 Capel-street ...	do.	8 do.	0	10	0
Greenman, James ...	27 Mary's-abbey ...	do.	10 do.	1	0	0
Grennan, Patrick ...	39 Amiens-street ...	do.	26 do.	3	0	0
Hewitt, Austin ...	72 Capel-street ...	do.	Deprived of ⅔ its Cream.	2	0	0
Do. ...	do. ...	do.	8 per cent. water	0	10	0
Kenny, Daniel ...	146 Upper Abbey-street	do.	15 do.	0	10	0
Lonergan, Anne ...	41 Lower Stephen-street	do.	40 do.	5	0	0
Moloney, Dorah ...	42 Upper Dorset-street	do.	14 do.	1	0	0
O'Reilly, Mary A. ...	20 Upper Kevin-street...	do.	12 do.	1	0	0
O'Toole, Peter ...	21 Upper Abbey-street	do.	11 do.	1	0	0
				£21	0	0

DURING THE YEAR 1893 THE FOLLOWING PERSONS WERE, UNDER THE PROVISIONS OF THE "SALE OF FOOD AND DRUGS AND MARGARINE ACTS," SUCCESSFULLY PROSECUTED BY INSPECTOR JAMES COOKE.

Name	Address	Articles Sold	Adulterated with	Fine		
				£	s.	d.
Bell, James	36 Boyne-street	Milk	17 per cent. water	1	0	0
Bray, Francis	116 Francis-street	do.	30 do.	4	0	0
Byrne, Bridget	37 Up. Clambrassil-st.	do.	30 do.	3	0	0
Byrne, Denis	14 Dolphin's Barn	do.	12 do.	1	0	0
Byrne, James	12 Cross Kevin-street	do.	15 do.	1	0	0
Byrne, Teresa	5 St. Agustine-street	do.	20 do.	1	0	0
Cocoran, Eliza	33 Cuffe-street	do.	11 do.	1	0	0
Duff, William	1 Grand Canal-street	do.	13 do.	1	0	0
Dycer, Charles	21 Camden-row	do.	23 do.	3	0	0
Farrell, Teresa	10 Redmond's Hill	do.	11 do.	0	10	0
Harrison, Mary	11 Werburgh-street	do.	16 do.	1	0	0
Hannon, John	155 James's-street	do.	10 do.	1	0	0
Hayden, Anne	26 Francis-street	do.	45 do.	5	0	0
Herity, Elizabeth	47 James's-street	do	11 do.	1	0	0
Jones, Thomas	31 Denzille-street	do.	80 do.	5	0	0
Kavanagh, Denis	2 Charlemont-place	do.	10 do.	1	0	0
Kenny, Patrick	9 Cork-street	do.	11 do.	0	10	0
Keogh, Rosanna	16 Cuffe-street	do.	16 do.	1	0	0
Mooney, Thomas	88 Cork-street	do.	40 do.	5	0	0
Murphy, Peter	60 Sth. Gt. George's-st.	Breach of Margarine Act	—	10 £5 costs	0	0
Nolan, Elizabeth	32 Charlotte-street	Milk	25 per cent. water	3	0	0
O'Brien, Mary	6 Johnston's-place	do.	12 do.	2	0	0
O'Neill, Michael	42 Benburb-street	do.	20 do.	2	0	0
Timmins, Margaret	59 Meath-street	Breach of Margarine Act	—	0	10	0
Wilson, Elizabeth	14 Holles-row	Milk	14 per cent. water	1	0	0
				£55	10	0
			Costs ...	5	0	0
			Total ...	60	10	0

DURING THE MONTH OF JANUARY, 1893 THE FOLLOWING PERSONS WERE, UNDER THE PROVISIONS OF THE "SALE OF FOOD AND DRUGS AND MARGARINE ACTS," SUCCESSFULLY PROSECUTED BY INSPECTOR PATRICK SHEERAN.

Name	Address	Article	Adulterated with	Fine
Byrne, James ...	43 Thomas-street ...	Breach of Margarine Act	—	3 0 0
Kenny, Joseph ...	29 do. ..	do.	—	3 0 0
Synge, Alexander ...	10 Lower Pembroke-st.	Milk	11 per cent. water	0 10 0
				6 10 0
			Costs ...	0 10 6
			Total ...	£7 0 6

DURING THE MONTH OF JANUARY, 1893, THE FOLLOWING PERSONS WERE, UNDER THE PROVISIONS OF THE "SALE OF FOOD AND DRUGS AND MARGARINE ACTS," SUCCESSFULLY PROSECUTED BY INSPECTOR JOHN J. MYERS.

Name	Address	Article	Adulterated with	Fine
				£ s. d.
Alpin, Esther ...	34 Gt. Charles-street ...	Milk	11 per cent. water	1 0 0
Alpin, Timothy ...	42 Buckingham-street ...	do.	10 do.	1 0 0
Dunne, Margaret ...	81 Lr. Camden-street ...	Breach of Margarine Act	—	5 0 0
Hanlon, Peter ..	14 do. ..	do.	—	5 0 0
Montgomery, Thomas	3 Deane-street ...	do.	—	5 0 0
				£17 0 0

QUANTITIES OF DISEASED AND OTHERWISE UNSOUND FOOD CONDEMNED DURING THE YEAR 1893.

			Lbs.
80 Carcasses and 4 Sides of Oxen	=	Beef	33,447
13 „ of Calf	=	Veal	2,230
181 „ of Sheep	=	Mutton	21,020
58 „ of Swine	=	Pork	5,724
19 Barrels of Pigs' Heads ...	=	do.	6,720
225 „ of Herrings and 6 Boxes of Mackerel ...	=	Fish	33,260
1 Cwt. of Eggs	...	...	112
Butter	...	...	18
Game	...	...	190
Fruit	...	...	30
			102,751

SUMMARY.

Meat	69,141
Fish	33,260
Game	190
Eggs	112
Fruit	30
Butter	18
	102,751

The following persons were convicted for having sold, or for intending to sell, diseased or otherwise unsound food :—

	£	s.	d.
Richard Ball, Naul, County Meath	5	0	0
Edward Gaynor, 153 Great Britain-street	5	0	0
Thomas Butler, Moonside, County Meath	10	0	0
Edward Redmond, 1 Great Britain-street	5	0	0
Denis Cogan, 115 Thomas-street	2	0	0
James Nelson, 171 Great Britain-street	10	0	0
	£37	0	0

The greater number of carcasses of oxen were rendered unfit for food owing to pleuro-pneumonia. The animals were slaughtered under provisions of the Contagious Diseases (Animals) Act. In several instances the carcasses were affected by tuberculosis.

In one instance I found actinimycosis present, and affecting a portion of the carcass which is not the usual seat of the disease, namely, the space between the visceral and costal pleuræ. There was a diseased mass weighing 52 lbs.

A microscopic examination of the mass showed myriads of the rosette-shaped organism peculiar to this disease.

SAMPLES OF WATER ANALYZED DURING 1893.

February	10	—From Spencer Harty, Esq., C.E.,	1	sample.
Do	25	do	1	do
July	10	do	1	do
Sept.	11	do	4	do
October	2	do	3	do
Do	25	do	2	do
Do	28	do	2	do
Do	30	do	2	do
November	18	do	1	do
December	27	—Waterworks Committee	3	do
Monthly Return of Vartry and Canal Pipe-water			15	do
		Total for year ...	35	

ANALYSIS OF LOCH DAN WATER.

ONE GALLON (70,000 GRAINS), CONTAINS IN GRAINS: —

	Total Solid Matters, per gallon	Albuminoid Ammonia	Saline Ammonia	Nitrogen in Nitrites and Nitrates	Equal to Nitric Acid	Chlorine	Equal to Sodium Chloride	Hardness before boiling	Hardness after boiling	Phosphoric Acid	Oxygen absorbed in 15 minutes	Oxygen absorbed in 4 hours	Colour in two-foot tube
Centre of Lake ...	2·69	0·013	0·001	Faintest trace	Faintest trace	0·596	0·983	0·5°	0·4°	Trace	0·296	0·393	Deep yellow
Annamoe River	3·36	0·009	0·001	Trace	Trace	0·696	1·146	0·8°	0·7°	Slight trace	0·279	0·362	Deep yellow
Inchavoe River ...	3·41	0·011	0·0015	Trace	Trace	0·696	1·146	0·9°	0·8°	Slight trace	0·259	0·346	Deep greenish yellow

These waters contained large numbers of micro-organisms.

The City Water Supply was examined monthly in 1893, with the following results:—

	JAN.	FEB.	MAR.	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	OCT.	NOV.	NOV.	DEC.	DEC.
										Part of South	North	Sth. City Supply	Nth. City Supply	Sth. City Supply	Nth. City Supply
One Imperial Gallon (70,000 grains) contained—	Grains	Grains	Grains	Grains	Grains	Grains	Grains	Grains	Grains	Grains	Grains	Grains	Grains	Grains	Grains
Total solid matters .. Including—	5·400	4·500	4·550	4·200	4·025	4·550	4·550	4·300	4·550	20·700	20·300	19·820	19·650	25 000	25·900
Albuminoid ammonia ..	0·0060	0·0045	0·0045	0·0040	0·0045	0.0050	0·0035	0·0050	0·0060	0·0065	0·0070	0·0065	0·0060	0·0090	0·0080
Free ammonia ..	0·0005	0·0010	0·0010	0·0005	0·0015	0·0005	0·0005	0·0010	0·0005	0·0010	0·0015	0·0015	0·0015	0·0050	0·0020
Nitrogen in nitrates and nitrites	trace	trace	trace	trace	trace	trace	trace	trace	trace	trace	trace	trace	trace	trace	trace
Chlorine	0·994	0·994	1·093	1·093	0·994	0·894	0·994	0·976	0·994	1·093	1·192	1·192	1·192	1·192	1.093
Oxygen absorbed by permanganate of potassium solution—															
After 15 minutes at 80° F.	0·060	0·063	0·492	0·043	0·059	0·051	0·040	0·046	0·043	—	—	0·021	0·022	0·058	0·051
After 4 hours ,,	0·120	0·146	0·135	0·099	0·097	0·145	0·097	0·109	0·126	0·064	0·063	0·049	0·050	0·147	0·115
Hardness before being boiled	1·60°	1 50°	1·30°	1·80°	1·70°	1·60°	1·80°	1·70°	1·60°	16·00°	14·60°	15·60°	15·30°	17·50°	17·20°
Hardness after being boiled	1·25°	1·40°	1·20°	1·60°	1·50°	1·50°	1·55°	1·55°	1·50°	—	—	6·10°	5·90°	6·80°	6·70°
The microscopical examination was	satisfactory	satisfactory	satisfactory	satisfactory	satisfactory	satisfactory	satisfactory	satisfactory	satisfactory	satisfactory	satisfactory	satisfactory	satisfactory	satisfactory	satisfactory
The colour of the water, when looked at in a tube two feet long, was	clear, and slightly yellow	clear, and slightly yellow	clear, and very slightly yellow	clear, and very slight yellow	clear, slightly yellow; some suspended particles	clear; very slightly yellow	clear, faint, yellow	clear, faint, yellow	clear; some suspended particles; slight yellow	clear; few suspended particles; very faint yellow	very clear; few suspended particles; almost no colour	very clear; faint, bluish	very clear; faint, bluish	yellow, slight turbidity; some suspended particles	yellow, slight turbidity; some suspended particles
When the water was heated to 100° F. it exhaled	no peculiar odour	no peculiar odour	no peculiar odour	no peculiar odour	no peculiar odour	no peculiar odour	no peculiar odour	no peculiar odour	no peculiar odour	no peculiar odour	no peculiar odour	no peculiar odour	no peculiar odour	no peculiar odour	no peculiar odour

The Water examined in October, November and December was Canal Water.

The Vartry Pipe-Water.

For the first time of its introduction the Vartry failed to supply the city and suburbs with its usually sufficient quantity. This was owing to the phenomenally small rainfall of 1893. For a short period a portion of the city was supplied with water from the Grand Canal, which was found by chemical and bacteriological examinations to be of very good quality.

The question of obtaining a supply of water from Loch Dan was considered, but the results of the analysis of that water were not satisfactory. I give analysis of it, and of its contributions.

COMPARATIVE SUMMARIES FOR THE YEARS 1870-93.

Year	Number of Analyses Performed	Examinations of Petroleum	Quantity of Unsound Food Condemned	Number of Persons Fined for Selling Adulterated Food, or for Breaches of Margarine Act	Number of Persons Fined for Selling, &c., Diseased Meat, &c.	Number of Persons Imprisoned for Selling, &c., Diseased Meat &c.	Total Convictions	Amount of Penalties Imposed		
			lbs.					£	s.	d.
1870	219	...	391,057	15	23	4	42	156	18	0
1871	257	...	413,151	14	13	5	32	100	17	7
1872	523	...	332,961	67	25	2	94	434	5	0
1873	439	...	224,552	43	11	10	64	311	10	6
1874	405	...	258,682	37	4	6	47	150	5	0
1875	601	...	380,679	44	4	...	48	265	0	0
1876	1,001	...	229,111	68	10	4	82	271	5	2
1877	1,760	60	110,284	22	2	...	24	101	0	0
1878	1,700	58	243,084	14	4	...	18	52	11	0
1879	686	44	215,151	44	...	...	44	127	15	0
1880	758	72	262,497	65	1	1	67	321	0	0
1881	546	40	242,425	56	3	...	59	258	0	6
1882	979	87	187,845	43	...	...	43	194	0	0
1883	718	684	121,931	48	...	...	48	181	10	0
1884	894	27	152,572	63	2	...	65	297	0	0
1885	768	12	220,180	56	...	...	56	280	10	0
1886	428	4	214,694	43	...	...	43	211	0	0
1887	658	20	201,569	45	...	...	45	247	0	0
1888	289	20	78,721	32	3	...	35	187	0	0
1889	545	13	62,750	64	4	...	68	378	12	0
1890	532	8	82,669	67	10	...	77	248	16	0
1891	896	12	112,109	181	4	...	185	909	12	0
1892	839	6	108,042	138	14	...	152	443	14	0
1893	1,360	4	102,751	126	6	...	132	505	4	0
TOTALS,	17,701	1,171	4,949,462	1,395	143	32	1,570	6,634	5	9

APPENDIX.

The City Laboratory.

The following account of the City Laboratory was published in the Dublin *Daily Express* for 19th and 24th January, 1894.

Questions affecting the health of the city have of late been so much discussed, that we have all become more or less scientific. Everyone now talks of microbes, germs, impurities in water, chemical analysis, and other matters previously left to the doctor or the physicist. This being so, an account of the City Laboratory, and an indication of the work that it does, and the way in which it does it, may prove of general interest. The City Laboratory is located in No. 17 Castle-street, beside the Municipal Buildings, with which it is in communication. Its fittings are all of the kind best adapted to enable it to fulfil its purposes, and it is lit throughout with electric light. The ground floor is occupied with offices for clerical work, so that it is not until we reach the first floor that the place becomes of interest to the scientific inquirer. Here is a room seventy feet long by twenty feet broad. Several assistants, including Mr. Macallen and a distinguished lady graduate of the Royal University, are engaged all day in carrying out some of the most important processes of analysis. At the end of the room farthest from the street is a small glass-encased chamber which contains three chemical balances. One of these is so sensitive that the beam will turn with the weight of one thousandth part of a grain. The balances have to be kept encased with glass so that they may not get out of order, and the smaller weights which could not be taken hold of by the fingers are moved with a forceps. The larger weights are brass, and the smaller ones platinum, the very small ones being aluminum which is the lightest metal known. On the opposite side of the room is a recess in which there are several Bunsen flames, as well as an organic furnace, the fumes being all carried away by two eight-inch tubes overhead into the chimney. In the organic furnace, known quantities of matter are burned with certain chemicals, and the product distilled into a liquid. The amount of organic matter in the liquid produced, which, of course, is the same as was in the substance under analysis, is then determined by another process. Lime, soda, and black oxide of copper are among the principal substances mixed with organic matter and distilled by the furnace. The distilled product is collected either as water or carbonic acid gas, or over mercury. For the purpose of greatly increasing the heat of the Bunsen flames, when necessary to do so, there is a machine which, by hydraulic pressure, forces a current of air through the flame, making it so powerful that it brings small platinum vessels to a red heat in less than a minute. All the operations over the furnace take place in platinum vessels. Vessels of any other metal would quickly melt. One such vessel, in appearance something like a tin ladle, cost £40; but some of the smaller specimens were bought at as low a figure as £5. Adjacent to the furnaces are the drying ovens, where butter, milk, and other substances are kept at a constant high temperature until the water that they contain has been evaporated off and its quantity ascertained. The heat is maintained by the circulation of steam round the ovens, and the steam when condensed is available as a supply of pure distilled water. Within a few feet of the drying ovens are a set of filters. Where insoluble matter is viscid, filtration takes a very long time; but by an arrangement depending on the pressure of the atmosphere this difficulty has been overcome, and water with thick sugary substances in it can be filtered just as rapidly as ordinary water. The arrangement would take too much space to describe, but seems quite simple to those who have seen it. One of the most important parts of the establishment is the long bench for working at, with the shelves overhead containing bottles of standard solutions of all the various chemical re-agents employed in analytical testing. To those completely ignorant of chemistry, the processes here carried out would seem mysterious in the extreme. But to the middle grade Intermediate student, who has conned his Part 2 of Reynolds, the principal of these operations, and, indeed, many of their details, will be quite intelligible. Here, also, are seen some arrangements for extracting the fat from milk. In one process the substance is heated in a flask in ether. The fat and ether are vaporized, and ascend a long tube, which is surrounded by a condenser; the fat is collected in a vessel at one end, and the ether goes back to the flask, which is being heated. Here the boiling operation is repeated, and this continues until all the fat has been extracted. The second process is carried out by a most ingenious instrument, in principle something the same as the ordinary egg beater, in which, by rapid rotation, such a high degree of centrifugal force is generated that the fat of the milk all collects at one end of a graduated tube, and its amount may be at once read off. Another important instrument here found is one that looks like a combination of an old oven and a modern oil stove. This is termed a sterilizer. Its object is to destroy all organic life in certain substances. This is effected by exposing the substances to a constant temperature of 300 degrees, by means of the instrument referred to. There are ovens for giving air baths of a certain temperature, and there are condensers for distilling off and ascertaining the amount of alcohol in wines and drugs. One of the most interesting instruments in this portion of the laboratory is the large incubator specially made in Berlin, which is used principally in bacteriological research, and which is probably the most perfect thing of its kind in this country. It is encased with double doors and fitted with two walls, between which steam can circulate. It is heated from beneath, and there are beautiful automatic arrangements for keeping the temperature at a certain fixed figure. The instrument is largely used in searching for typhoid and other germs in water. A description of its use, as well as the arrangements for finding organisms in water, the absorbingly interesting microscopic investigations carried on, and also of the equipments of the departments dealing particularly with the testing of water and butter, must be left over for another article, to which this can but serve as a sort of rough general introduction.

SECOND ARTICLE.

At the end of the long room in the City Laboratory, referred to in our last article, is a hot-air chamber, built into the wall, and lined with asbestos felt, to make it fire-proof. This is used for searching for typhoid and other germs in water. Small glass bottles filled with water, and containing a mixture of sugar, are placed in this chamber, where they are exposed to a high temperature, and where fermentation takes place. If the water is impure it will at the end of some days be discoloured by a whitish mass that develops in it, but if it is pure no fungus forms, and the water remains perfectly clear and transparent. Adjoining the hot-air chamber is a bench for microscopic work. Here there are appliances which enable an investigator to detect a million organisms in a single drop of water, that is, provided that the water be sufficiently impure to contain such a large number. By means of a diamond worked by machinery as many as thirty thousand lines can be scratched on the surface of a piece of glass an inch long. If, say, one-tenth of a drop of water be put on a glass scratched in the manner indicated and put under the powerful microscope, the observer can count the number of organisms in that portion of the water lying between any two of the thirty thousand grooves scratched on the glass. He can then count the number of such grooves covered by the entire of the water, and multiplying such number by his former result, and cubing the product, he obtains approximately the number of organisms in the one-tenth of a drop of water. A simple calculation then gives the number in an entire drop. There was recently examined in this way in the City Laboratory a sample of water which was found to contain a million organisms for every drop. But, of course, this was a very unusual specimen, as in potable water there are no such organisms at all. Reverting for a moment to the incubator, described in our former article, it may be well to say a few words as to its use for bacteriological work. A drop of the substance the organisms in which are to be developed is put into a sterilized pipette, that is to say, a small glass tube in which all organic life has been destroyed by exposure to intense heat. The pipette is then placed in the incubator, and a certain mild heat maintained. Spores develop in the organic substance in the pipette. These spores become full-grown organisms, and these organisms rapidly produce others. Following the method of M. Pasteur, the organisms are cultivated for two or three weeks, and several generations of them are produced. By this time the organisms have lost nearly all their virulence, and if inoculated into the blood, produce a mild form of the disease that would have been produced by the original organism. Of the medical effects of inoculation, of course it is not our purpose here to speak. Ascending to the second floor of the laboratory, the visitor reaches a room devoted exclusively to the testing and analysis of water. When the water to be tested is distilled, all the free ammonia is distilled, and other matter is left behind. The latter product is treated with permanganate of potash, and again distilled, leaving a certain amount of matter behind in the retort. The first residue is saline ammonia, but the second is the dangerous kind known as albuminous ammonia, which is the most serious impurity of water. By weighing the water both before and after distillation, and by weighing the residues, the proportion of both sorts of ammonia in the water under examination is ascertained. The proportion of saline ammonia in water varies from two grains to five hundred grains in a gallon. Vartry water contains 4½ grains, and canal water 14 grains, but soft water contains very little of it. By putting some of Nessler's fluid into water the presence of even minute traces of ammonia is ascertained by the yellow colour produced, and the amount of the ammonia is estimated by the intensity of the new colour. There are several other tests to which the water is subjected, and all water analyzed is also examined with the microscope to see if there are any organisms in it. Off the water-testing room is an apartment in which the testing of spirits and wines is carried on. In the same room there is a large balance, sensitive to weights varying from two and a-half pounds to the one thousandth part of a grain. On the third floor of the laboratory is the department which is chiefly used for analyzing butter. The first thing done with the butter is to determine the amount of water and salt which it contains, as these substances are often present in excess of their proper proportion. The fat is then separated out of the butter, and examined in case that it may contain margarine, or other adulterating substance. To do this it is necessary to melt portion of the butter, and filter off the melted fat which floats on the top, which is then examined. The analysis of butter for the purpose of seeing if it be adulterated with margarine, depends on the fact that the fat of butter contains certain distinctive and easily recognised acids which are absent in other animal fats, such as lard and suet. It is further found that butter fat is much heavier than other animal fats. Another portion of the analysis is the finding of the relative amounts of the volatile and the fixed fatty acids. The amount of the volatile acid is determined by turning the fat into soap, the soap being subsequently decomposed by an acid, and the volatile acids distilled off. To convert the fat into soap it is boiled with caustic soda, and the soap is decomposed to sulphuric acid, which liberates the butter acids. The volatile acids having been determined, the fixed acids are obtained by successive washings with boiling water, and upon the relative amounts of the fat, the volatile and fixed acids, a conclusion is come to as to the presence of margarine, and the amount present in the butter under analysis. There are many other processes of interest carried on in the laboratory to which we cannot now refer. But the visitor in coming away is certain to, at least mentally, re-echo the words of Professor Billings, the distinguished American doctor, who said that in completeness of equipment and extent it was the finest purely analytical laboratory that he had ever seen. But not only will he be surprised at the laboratory itself, but at the delicate nature of the multifarious operations which are carried on in it so successfully under the able superintendence of Sir Charles Cameron from one year's end to the other. To Sir Charles is due the credit of having organized this department, and in it the citizens have a safeguard for the investigation of food supplies such as is possessed by no other city in the United Kingdom. The enormous amount of work which is carried on silently and unceasingly, the statistics of the Public Health Committee, copious though these statistics are, fail to reveal. No one who has not had the opportunity of inspecting the City Laboratory can have the faintest idea of the scientific watch which is so constantly persisted in by the staff under the direction of Sir Charles Cameron for the detection of dangers to which the casual observer cannot but be blind.

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